MARTHA R. GRABOWSKI MarthaGrabowski@gmail.com

EDUCATION

ED C CITION			
Ph.D.	Management/Information Systems, Expert Systems		
	Rensselaer Polytechnic Institute Troy, NY	May 1987	
M.S.	Industrial and Management Engineering		
	Rensselaer Polytechnic Institute Troy, NY	August 1983	
M.B.A.	Management Information Systems		
	Rensselaer Polytechnic Institute Troy, NY	August 1982	
B.S.	Nautical Science and Marine Transportation of		
	U.S. Merchant Marine Academy Kings Point, NY	June 1979	

LICENSE

- Second Mate, Unlimited Tonnage, Any Oceans, Radar Observer (US Coast Guard Merchant Marine license, inactive)
- Lieutenant Commander, U.S. Naval Reserve (inactive Reserve)
- FAA Part 107 Remote Uncrewed Aerial System (UAS) Pilot May 2023

TEACHING AND RESEARCH INTERESTS

Autonomous systems, enterprise and cloud systems, digital transformation, digital strategy, resource allocation, technology impacts in safety-critical systems, risk analysis and risk mitigation, advanced analytics, machine learning, artificial intelligence, visualization, augmented reality, high consequence settings, heterogeneous (structured, unstructured) data analytics, high reliability virtual organizations, intelligent real-time systems, transportation systems, human factors.

ACADEMIC EXPERIENCE

LE MOYNE COLLEGE Syracuse, New York

Madden School of Business

Chair, Management, Leadership & Information Systems Department May 2023 - present Director, Poland Jesuit Center for Research & Teaching Innovation McDevitt Distinguished Chair in Information System

Director, Information Systems Program

Previous Roles:

Chair, Accounting Department Chair, Business Administration Department

Coordinator, Le Moyne College SAP, IBM, Oracle University Alliances Director, Le Moyne – Zogby Center for Contemporary Catholic Trends

Acting Chair, Accounting Department Joseph C. Georg Endowed Professor Assistant, Associate Professor, Professor

Information Systems (Undergrad Program, MS Information Systems) Program 2001 – 2020

1987 to present

November 2021- present

September 2014 – present; Chair 2010-2014

September 2001 – present

July 2020 – January 2023 September 2009 – August 2012

July 2006 – present January 2007 - 2010 September 2003 – May 2004 September 1994 - August 1997

September 1987-92, 1992- 98, 1998 - present

- Founded (2001) and lead a #18 nationally US News and World Report-ranked (2023-24) undergraduate Information Systems program and an MS Information Systems program (2014-2020). Increased graduate enrollment from program inception (0) to an initial cadre of 30 graduate students within 5 years.
- Forged digital technology partnerships and alliances with 40 global Fortune 100 companies and institutions; national accounting, consulting and advisory services firms; and regional non profit organizations.
- Formed (November 2021) and currently lead the Walter and MaryAnne Poland Jesuit Center for Research & Teaching Innovation, creating faculty research infrastructure and programs for a top-100 regional business school.
- Created (September 2013) and currently lead the McDevitt Information Systems Research program, generating externally sponsored research projects in autonomous systems; generative AI; healthcare cybersecurity and blockchain; uncrewed aerial systems in safety-critical settings; machine learning; augmented and virtual reality, simulation and wearable technology. Research results in patents, Tier 1 research publications and external research support for undergraduate and graduate business and technology students.

LE MOYNE COLLEGE Syracuse, New York, continued Madden School of Business

- Created, nurtured and lead a 35-member Information Systems Program Industry Advisory Board that provides industry guidance and a pipeline of internships and full-time roles for diverse, first time college attendees and non traditional technology students.
- Inaugurated academic alliances with technology leaders and vendors, including Amazon, Google, IBM, Oracle, SAP, UiPath Robotic Process Automation and Tableau.
- Teach undergraduate and graduate courses in information systems, enterprise and distributed systems, digital transformation, database systems, project management, network and cloud architectures, research methods, risk management and analytics.
- Hired, mentored and tenured junior faculty; and created links across Madden School and Le Moyne College
 departments and programs, including instituting joint majors and programs between the Information Systems
 major and the Computer Science, Accounting, Business Analytics, Finance, Human Resource Management,
 Management and Leadership, Marketing and Risk Management & Insurance programs and departments.

RENSSELAER POLYTECNIC INSTITUTE Troy, New York

Department of Industrial and Systems Engineering (name change)
Department of Decision Sciences & Engineering Systems
Senior Research Scientist (Research Professors eliminated)

Research Professor, Associate, Assistant, Visiting Professor

1988 to present

February 2010 to present June 1989 to February 2010 July 2014 to present 2001-2014, 1995-2001, 1989-1995, 1988-89

Lead research teams in (1) evaluating technology impacts in safety critical systems, including autonomous systems and uncrewed aerial systems; (2) risk analysis and risk mitigation in large-scale systems, (3) utilizing advanced data analytics and visualization in complex settings, and (4) studying high reliability virtual organizations (see Research Projects, below).

INDUSTRIAL EXPERIENCE

Program Integration Manager

General Electric Company Corporate Research and Development Center

June 1991 to June 1992 Schenectady, New York

Manager, Expert Systems Applications

General Electric Company Tactical Systems Department

March 1987 to June 1991 Pittsfield, Massachusetts

Applications Manager, Navy Marketing

General Electric Company Defense Systems Division

July 1985 - March 1987 Pittsfield, Massachusetts

Field Change Analyst

General Electric Company Machinery Apparatus Operation

November 1982 - July 1985

April 1981 - December 1981

Schenectady, NY

Third Officer, MV OxyProducer Hvide Shipping Company

Third Officer, SS El Paso Arzew El Paso Marine Company

Fort Lauderdale, FL July 1979 - March 1981 Solomons, Maryland

SS El Paso Consolidated, SS El Paso Paul Kayser

PATENTS AND PATENT APPLICATIONS

Critical System Operations and Simulations using Wearable Immersive Augmented Reality Technology U.S. Patent 127 101 159, with Jean-Philippe Rancy 14 July 2020

Integration of Unmanned Aerial System Data with Structured and Unstructured Information for Decision Support, U.S. Patent 11,361,664, with Kristi Gloude 14 June 2022

Multimodal Decision Support with Unmanned Aerial Systems for Safety- and Mission-Critical Operations in Remote Regions, Application 17/070, with Gwendolyn Morgan, Jean-Philippe Rancy 23 May 2022

M. Grabowski HONORS AND AWARDS

NORS AND AWARDS	
National Academies of Sciences, Engineering and Medicine	
Transportation Research Board	
W.N.Carey, Jr. Distinguished Service Award	2021
Lifetime National Associate award	2003
American Bureau of Shipping, Member	2001-present
Industry/Professional Society Awards	
Upstate NY Venture Ecosystem 'Community Catalyst' (Entrepreneurship) Award	2017
Collegiate Science Technology Entry Program (CSTEP) Mentor Award	2013
Technical Alliances Council (NY) – ACM/IEEE Educator of Year	2011
Le Moyne College	
Madden School of Business Faculty Mentor Award	2023
Ignatian Mission Award (Jesuit Student Emergency Fund Advisory Board)	2021
Inaugural McDevitt Chair in Information Systems	2012-present
Ignatian Service (Honorary Alumnus) Award	2010
Bene Merenti Service Award	2007
MBA Teacher of the Year	1999
Joseph C. Georg Endowed Professor	1994 - 1997
Rensselaer Polytechnic Institute	
Edith and Del Karger Dissertation award (Advisor to Aaron Rowen)	2020
Edith and Del Karger Dissertation award (Advisor to Zhuyu You)	2011
Edith and Del Karger Dissertation prize	1987
Rensselaer Polytechnic Institute doctoral fellowship	1984-1987
IBM Fellowship in Information Systems (won, not accepted)	1985
Rensselaer Topper Management Fellowship	1984-1985
W. Franklin Spaffard prize in Management	1982
United States Merchant Marine Academy	
Outstanding Professional Achievement Award	1999, 2004
American Institute of Marine Underwriters Award	1979
Matthew Fontaine Maury Navigation Award	1979
US Merchant Marine Academy Officer's Club Award	1979
Rhodes Scholarship candidate	1979
Navy Achievement Medal	1988
General Electric Management Award	1987, 1984
•	1507, 1507
Notice of Research Roands	
National Research Boards National Academies of Science Engineering and Medicine Washington DC	
National Academies of Science, Engineering and Medicine Washington, DC a. Transportation Research Board/Marine Board	
•	2022, 2007, 2008
	1-2022; 2006-2008
	3-2020; 2004-2006 3-2022, 2001, 2008, 1002, 100
	i-2022, 2001-2008, 1992-199 i-2022, 2006-2008
Marine Board Executive Board; TRB Executive Committee 2020	
	2015
b. Planning Committee, Workshop on Passenger Vessel Safety 2014	2015
 b. Planning Committee, Workshop on Passenger Vessel Safety c. Planning Committee, Workshop on Navigation in the Arctic 2014 2015 2016 2017 2018 2018 2019 2019	-2012
 b. Planning Committee, Workshop on Passenger Vessel Safety c. Planning Committee, Workshop on Navigation in the Arctic d. Committee on Marine Safety & Human Factors 	

2. National Policy Committees

National Academies of Science, Engineering & Medicine Washington, DC

a. Member, Committee to Review U.S. Coast Guard Authorities 2021-2023
 b. Member, Committee to Review U.S. Coast Guard Stability Regulations 2018-2019
 c. Member, Committee to Review Impediments to US Flag Registry 2015 – 2016
 d. Chair, Oil Spill Response in the Arctic, policy study 2012 – 2014
 e. Chair, Naval Engineering in the 21st Century policy study 2009 – 2011
 f. Vice Chair, Tsunami Readiness Assessment committee 2008 – 2011

f. Vice Chair, Tsunami Readiness Assessment committee 2008 – 2011
g. Chair, Committee on Evaluating Shipboard Display of Automated ID Systems 2001-2003

b. Chair, Committee on Advances in Piloting and Navigation 1991-1994 (chair 1993-94)

i. Committee on Effect of Smaller Shipboard Crews on Maritime Safety 1998-1990

3. Corporate, Government, Academic and Safety Advisory Boards, Task Forces

City of Syracuse, <u>Surveillance Technology Task Force</u> 2021 - present

U.S. Department of Transportation, Maritime Administration,

U.S. Merchant Academy Advisory Board 2019-present

U.S. Department of Defense, Intelligence Community

Center of Excellence Advisory Board at Syracuse University 2019-present

St. Aloysius/Mangalore, India School of Information Technology

& Bioinformatics Advisory Board 2015-present MS, Computational Science Board of Studies 2019-present

U.S. Department of Homeland Security, Center of Excellence for Secure

and Resilient Maritime Commerce, Stevens Institute, Advisory Board 2010-2020
U.S. Coast Guard Prevention through People Advisory Board
U.S. Coast Guard Navigation Safety Advisory Council
1994-1998

4. Editorial Boards

European Journal of Pure and Applied Mathematics

2007 – present
International Journal of Mobile Learning and Organization
2007 – 2017
TransNav, International Journal of Navigation and Transportation Safety
2015-present

5. Digital Technology/Transformation Partnerships

St. Aloysius Management & Info Technology (AMIT), Mangalore

Google Engineering Technology April 2023-present May 2022 - present National Grid Business Intelligence Center of Excellence Amazon Web Services (AWS) Cloud Practitioner/AWS Academy February 2022-present NuAir Unmanned Aerial Systems October 2021 - present UiPath Robotic Process Automation Academic Alliance May 2021 - present Siemens Digital Transformation February 2021-present SUNY Upstate Medical University Information Management Team April 2019 - present DuPont/Workday Remote Internship program April 2020 - present U of Rochester Health Project Management Alliance September 2018 – present United Technology/Raytheon IT Leadership Program September 2018 - present Xerox Human Capital Technology Academic Alliance March 2017 - present General Motors Autonomous Systems Division Partnership April 2016 – present February 2015 – present AYCO/Goldman Sachs Technology Partnership GE Digital Technology Leadership Development Program September 2011 – present AXA-Equitable Academic Partnership September 2011- present IPMorganChase – Le Moyne Technology Alliance September 2013 – present Ernst & Young LLP (EY) Risk Advisory Services/NYC Partnership January 2d015- present November 2013 – present Google Glass Partnership BNYMellon Academic Partnership January 2008 – present IBM Academic Alliance July 2008 – present July 2006 – 2020 SAP University Alliance Program July 2006 – present Oracle University Alliance Program Loyola Institute of Business Administration, Chennai, India January 2015 – present

January 2015 – present

RESEARCH PROJECTS AND GRANTS _

Western Alaska Worst Case (Oil) Discharge Analytics

August 2023 – present

1-year McDevitt IS Research project with Alaska Chadux Network to analyze trends and develop forecasts and predictive models using generative AI for Arctic, Western Alaska and Prince William Sound tank vessel transits, oil cargo volume and projections to support oil spill response activities for oil capacity worst case discharges.

Municipal Data Governance and Cybersecurity

August 2023 – present

1-year McDevitt IS Research project with City of Syracuse, Accountability, Performance and Innovation Team (iTeam) to develop and evaluate municipal data governance policies and procedures, and to develop best practices and performance impact metrics for the City of Syracuse.

Technology Acceptance of Virtual Reality for Mindfulness

February 2023 – present

1-year McDevitt IS Research project investigating the contribution of virtual reality for meditation and mindfulness for college students experiencing anxiety, stress and workload pressures

Uncrewed Aerial Systems (UAS) & Autonomous Systems in Healthcare Logistics & Cybersecurity February 2022 – present 2-year McDevitt IS Research project with SUNY Upstate Medical University, Autonomous Systems Group, and Chief Information Security Officer (CISO), Syracuse, NY, developing and evaluating UAS architectures, policies and cybersecurity impacts of autonomous uncrewed aerial systems' deliveries of medical material and systems to Upstate medical units, centers and patients. FAA Part 107 Remote Pilot certification received (May 2023).

Evaluating Wearable Immersive Augmented Reality (WIAR) Technology in Safety-Critical Systems — August 2016 – December 2023 7-year project with Maritime Institute of Training and Graduate Studies-Pacific Maritime Institute (MITAGS-PMI), Linthicum Heights, MD, an operational ship simulator, and the New York City Department of Transportation/Staten Island Ferry to evaluate the impacts of wearable, immersive augmented reality technology, minimal and mobile technology, and varying levels of automation on operator performance and situation awareness in safety-critical systems. Study involved data collection and analysis from ship's masters, mates and pilots in simple and complex navigational scenarios over time under varying conditions of stress, fatigue and vigilance.

Navigating the New Arctic—Emergency Response in the Arctic: Investments for Global Capabilities, Local Benefits Sept 2018 – Aug 2024 6-year NSF CMMI Collaborative Research project with Clemson University, University of Alaska/Anchorage and North Carolina State University, creating Operations Research (OR) resource allocation models that identify where and when to make critical infrastructure investments to improve emergency response in the Arctic (ERA), integrating those investments into local communities. This project integrates social science research in local Arctic communities with operations research models, linking economic, social, cultural, and technical feasibility and desirability with local knowledge. The results are intended to develop and co-produce knowledge with local and indigenous communities on how to design ERA systems that have positive impacts in local communities where the supporting infrastructure is built and maintained.

Autonomy in Uncrewed Aerial Systems (UAS)

May 2016 – August 2024

8-year McDevitt Information Systems research project with University of Alaska, Fairbanks and U.S. Coast Guard to examine the contributions of autonomous uncrewed aerial systems (UAS) in remote and infrastructure-poor settings such as Arctic oil spill response, emergency response, facilities inspection, and search and rescue.

The Coast Guard's Next Decade: An Assessment of Emerging Challenges & Statutory Needs

September 2021 – May 2023

18-month study as member of a National Academies of Science, Engineering & Medicine's Consensus study for the U.S. Coast Guard assessing emerging trends in autonomous vessels, Arctic operations, cybersecurity, offshore wind, migration, illegal, unreported and unlicensed fishing and aquaculture, and the adequacy of Coast Guard statutory authorities to address those emerging trends.

Risk Assessment of Shipping Operations in Canadian Waters

April – August 2022

4 month review of shipping operations risk assessment for Transport Canada, the Canadian Coast Guard and Clear Seas, LLC, to evaluate the data, methodology, results and recommendations of a tanker operations risk assessment for Canadian waters. Peer review with Dalhousie University, Dillon Consulting, the Society of Naval Architects and Marine Engineers, and Clear Seas, Center for Responsible Marine Shipping, British Columbia, Canada.

RESEARCH PROJECTS AND GRANTS, continued _

Predictive Analytics and Machine Learning in Safety-Critical Systems

April 2020 – August 2022

2-year research project with the U.S. Navy, Commander Naval Surface Forces (CNSF) and Naval Safety Center, San Diego, California to develop, test and explore predictive analytics and machine learning approaches to improve naval surface ship safety and reliability. Using structured and unstructured data, the project applies machine learning, classification, clustering and text mining techniques to identify safety performance patterns and safety recommendations improving naval ship safety.

Augmented Reality and Unmanned Aerial Systems: Municipal Firefighting

July 2019 – June 2020

1-year McDevitt Information Systems Research project with the City of Syracuse and the Syracuse Firefighters to develop, test and integrate unmanned aerial systems (UAS) imagery data with open source commercial building GIS data, historical incident and building violation data, as well as hydrant and water pressure data to provide Syracuse firefighters with visualizations and decision support prior to fighting municipal building fires.

Linking Team Fluidity to Organizational Performance in Team-Centric Organizations

August 2014 – June 2019

5-year NSF Infrastructure Management and Extreme Events project CMMI/ IMEE 10-1638 to extend and test theories that link performance processes and outcomes within and across levels of team-centric organizations. The project developed and evaluated new theory and methodologies of multi-level dynamic and reciprocal linkages in post-disaster debris removal operations, contributing to understandings of team-based, fluid organizations following large-scale disasters.

Marine Transportation Risk Data Analytics and Visualization

September 2017 – August 2018

1 year research project for U.S. Coast Guard Headquarters/Marine Safety Center and Sector New Orleans/District 8 (DHS USCG Task Order HSCG23-17-J-MSR065) to develop new data analytics methods and visualizations to assist port and U.S. Coast Guard risk and safety decision makers in New Orleans and the Lower Mississippi River in managing global marine transportation system and supply chain risks. The project applied machine learning, classification, clustering and text mining techniques to identify, repair and report inaccurate and inconsistent marine casualty and incident data in the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database.

Dynamic Network Modeling for Arctic Resource Allocation (DMARA)

May 2013 – June 2018

5-year research project for U.S. Department of Homeland Security Center of Excellence Command, Control and Interoperability Center for Advanced Data Analysis (CCICADA) (http://ccicada.rutgers.edu/) and U.S. Coast Guard District 17/Alaska to analyze role of dynamic networks, scheduling and resource optimization/allocation in support of Coast Guard Arctic missions for oil spill response, search and rescue, marine transportation and resource deployment in large-scale, mission critical systems.

Immersive, Wearable Ubiquitous Computing in Extreme Environments

November 2013 - December 2017

4-year research project using Google Glass to examine use of immersive, wearable, location-based ubiquitous computing in extreme settings, including vessel navigation; remote locations; oil spill response; Arctic search and rescue; emergency medicine; and virtualization.

Responding to Oil Spills in Arctic Marine Environments

November 2012 – June 2014

Chair of 2-year National Academies policy study for 8 sponsors – the American Petroleum Institute, U.S. Arctic Research Commission, Bureau of Ocean Energy Management, Bureau of Safety and Environmental Enforcement, Marine Mammal Commission, National Oceanic and Atmospheric Administration, Oil Spill Recovery Institute and the U.S. Coast Guard – to assess the current state of science regarding oil spill response and environmental assessment in the Arctic region. The project reviewed new and on-going research activities in the public and private sector to identify opportunities and constraints for advancing oil spill research, described promising new concepts and technologies for improving oil spill response, and recommended strategies to advance research and address information gaps.

Web-based Interactive Technologies in Extreme and the Response to Warnings for Extreme Events

June 2011 – June 2014

3-year NSF project CMMI-1162409 to study the role of social media in warning response for extreme events, including data from #SuperStorm Sandy in October 2012 and from the March 11, 2011 magnitude 9.0 earthquake and tsunami in Sendai, Japan. Using on-site data collected at two tsunami warning centers (TWCs) in Alaska and Hawaii, as well as 12 million instances of social media data (Twitter tweets), the project mapped the data collected to the social processes of warning decision making using graphic theoretic models to extract emergency-relevant information from the data.

RESEARCH PROJECTS AND GRANTS, continued _

McDevitt Chair in Information Systems; Distinguished Chair (2014 – present)

September 2012 – present

Developed interdisciplinary undergraduate research program supporting 42 undergraduate and 12 graduate McDevitt Information Systems (IS) Fellows over 10 years (to 2024). Developed undergraduate peer-reviewed research publication program resulting in 7 peer-reviewed publications, 2017-2023. McDevitt IS research topics included the use of social media in extreme settings; resource allocation models and environmental impacts in the Arctic; shipping trends in the Bering Strait, Big Data challenges in financial services and distributed logistics supply chains; health information systems interoperability; use of immersive, hands-free Google Glass technology in emergency medicine and remote and infrastructure-poor settings; integration of Eastern and Western medicine; and human systems integration and operator performance challenges in swarm unmanned aerial systems (UAS) operations in remote settings; machine learning and predictive analytics with unstructured accident and incident data; municipal UAS cybersecurity and drinking water analytics; blockchain methods for personal health monitoring device security; ransomware; health information systems; augmented reality and UAS for Arctic communications and search and rescue; infrastructure impacts of autonomous vehicles; and human-computer interaction and Universal Design impacts of UAS, augmented reality and large language models (LLM) for emergency and disaster management. 15 McDevitt IS Research Fellows participated in National Academies' workshops in October 2012, 2015 & 2016, and National Academies Marine Board meetings, 2016-2022; 2 McDevitt IS Fellows in National Academies committee meeting in Fairbanks, Alaska in March 2013; Honors in IS and Masters Theses, 2013-2023.

Team Fluidity and Organizational Performance in Virtual Organizations: Large Scale Debris Removal September 2011 – August 2014 3-year project for U.S. Army Corps of Engineers investigating the role of team fluidity and organizational performance in loosely structured virtual organizations. Project investigates the role of team interdependence, complexity and external volatility in virtual organizational performance, within the context of large-scale, post-disaster debris removal, in the wake of a burst of 64 tornadoes in the state of Alabama in 2011. Comparative data from a series of U.S. East Coast storms, including that from #SuperStorm Sandy in October 2012, were assessed to develop multilevel analyses of organizational, team and individual performance to benchmark and predict performance.

Business Process Analysis Template for Next Generation Short-Haul Trucking

October 2010 – May 2011

9-month project for Riccelli Enterprises to develop an information architecture and business process template for next generation short-haul trucking, including a vendor analysis of new real-time monitoring and control technology. Recommendations and a roadmap to improve the firm's business processes, information architecture, business standards and practice were developed. The project also examined the ethical questions associated with disruptive new technology introduction that spurs exponential market growth with controversial environmental impacts. An inaugural case study in the Le Moyne College Business Case series was developed from this project.

Financial Cybersecurity in Complex, Heterogeneous Data Environments

June 2010 – June 2012

2-year project with the Bank of New York Mellon, Morgan Stanley and the Financial Services Sector Coordinating Council's R&D Committee to integrate design and operations knowledge of secure financial networks, and then assess the observed patterns using a variety of analytical methods. The approach utilized three techniques: 1) connecting historical data, real-time monitoring data and other data sources to population knowledge and industrial databases of known security risks through data cleansing, data mining and integration; 2) employing time series and statistical estimates, along with baseline behavioral models developed using Geometric Brownian Motion and probabilistic methods to establish baseline use of the cyber systems; 3) fusing the results and simulating the cyber systems concerned using software agents to detect structural risks such as load-related weaknesses and behaviorally-based disruptions, based on the population and behaviorally-based models.

Naval Engineering in the 21st Century

February 2009 – June 2011

Chaired a 2-year policy study by the National Academies/National Research Council committee to review the future of naval engineering in the 21st century for the U.S. Navy's Office of Naval Research (ONR). The study evaluated the current state of U.S. naval engineering science and technology (S&T) activities and proposed improvements in innovation, research and educational capabilities for future needs of the Navy.

Tsunami Warning and Forecast Systems and Tsunami Preparedness

July 2008 – June 2011

Vice Chair for a 3-year National Academies/Ocean Studies Board study for the U.S. Congress and the National Oceanic and Atmospheric Administration (NOAA) to review NOAA's Tsunami Program; assess existing U.S. tsunami detection, forecast, and warning systems; provide an overview of national preparedness; highlight opportunities to improve the nation's tsunami preparedness in the future and identify novel, promising approaches to risk assessment and instrumental warning systems.

RESEARCH PROJECTS AND GRANTS, continued

Leading Safety Indicators of Risk in Marine Transportation

October 2003 – December 2011

8-year project for American Bureau of Shipping, Exxon/Mobil-SeaRiver Maritime, Overseas Shipholding Group, Maersk Lines, LLC, and A.P. Moeller, LLC to investigate potential predictive safety indicators that could lead to human errors, near misses, incidents, and accidents. Developed models, and administered and analyzed longitudinal safety culture perception surveys from 1600 domestic and international shoreside and shipboard personnel to three industry partners. Results identified leading indicators of safety for maritime energy transportation, container and supply chain disruption operations.

Puget Sound Vessel Traffic Risk Assessment, Washington State

May 2006 – June 2009

3-year research project for US Coast Guard, US Army Corps of Engineers, British Petroleum (BP) and Ocean Advocates, as a result of a settlement between BP and Ocean Advocates. Project developed a 20-year vessel traffic and environmental simulation to evaluate the risk of increased tanker traffic over the next twenty years at the BP Cherry Point, Puget Sound refinery. Research focuses on evaluating the impact of technology on maritime risk, accident and incident history analysis; the role of human and organizational error in this large safety-critical system; and the generalizability of the safety culture-safety performance models and results developed.

Risk Analysis of Tanker Tug Escorts

July 2004 – June 2005

1-year project for State of Washington, Department of Ecology, Spill Prevention, Preparedness and Response Program to evaluate risk of tug escorts for laden tankers in Puget Sound, Washington State.

St. Lawrence Seaway AIS Performance Impact Study

April 2002 – December 2005

3-year project for U.S. Department of Transportation, Transportation Security Administration, and St. Lawrence Seaway Development Corporation to evaluate technical, economic, logistical and safety impact of carriage requirements for automatic identification systems (AIS) aboard domestic and international vessels on St. Lawrence Seaway and the Great Lakes.

Distributed Mobile Collaborative Networks

October 2002 - August 2003

10-month joint research project between Le Moyne College and Warsaw University, Warsaw, Poland, investigating cognitive and perceived learning outcomes associated with faculty and student use of distributed mobile collaboration networks facilitated by a variety of electronic collaboration technologies: face-to-face, audio, low resolution audio/video conferencing, high resolution audio-video conferencing, and mobile hand-held audio/video, wireless Internet networks. Project jointly funded by Le Moyne College and Warsaw University.

Shipboard Display of Automatic Identification Systems Information

May 2001 – May 2003

Chaired an 18-month National Research Council study for the U.S. Coast Guard, Transportation Security Administration to evaluate technical and human factors aspects of shipboard display of automatic identification systems information. Committee recommendations to provide basis for U.S. Coast Guard regulations on AIS as well as U.S. position on AIS at International Maritime Organization (IMO) meetings.

Risk Analysis of California-Federal Water Quality and Reliability

March – September 2002

6-month project for State of California-Federal Water Quality (CALFED) program to recommend risk analysis process for levee integrity and water quality reliability.

Failure Not An Option: High Reliability Financial Telecommunications

October 2000 – May 2001

8-month contract from the Society for Worldwide Interbank Financial Telecommunications (SWIFT) to study and recommend best practices for a high reliability financial telecommunications network and a distributed virtual organization.

Design of Embedded Intelligent Real-Time Navigation & Piloting System

January - December 2000

1 year contract from Lockheed Martin, Ocean, Radar & Sensor Systems Department to develop an object-oriented design for an embedded intelligent real-time navigation and piloting system for next generation naval vessels.

Design and Evaluation of an Improved Continuous Operational Real Time Monitoring System May 1999 – December 2000 18-month contract from the National Oceanographic and Atmospheric Administration (NOAA) to develop the requirements for and to evaluate a national real-time oceanographic network.

RESEARCH PROJECTS AND GRANTS _

Risk Evaluation of Passenger Vessel Operations

June 1998 – June 1999

1 year contract from the Washington State Department of Transportation, Washington State Ferries to evaluate the adequacy of safety provisions for passengers and crew on Washington State Ferries utilizing vessel accident and incident data analysis coupled to vessel traffic and environmental simulation. Research centered on human and organizational error in large-scale systems.

Surface Ship of the Future Automation System Development

January 1998 - December 1999

2 year contract from Lockheed Martin Ocean, Radar & Sensor System Department to develop the requirements and design for an object-oriented information architecture for next generation U.S. Navy surface ships (SC 21, DD21).

Evaluation of Maritime Risk: Port of Houston

January – September 1997

8-month contract from the Port of Houston Authority to evaluate the risks of passenger vessel traffic to the port of Houston.

Development, Test and Evaluation of SMARTBRIDGE

August 1995 to July 1998

3 year contract from Department of Defense Advanced Research Projects Agency (ARPA) to develop, test and evaluate with Lockheed Martin, NOAA, and Chevron Shipping Company an integrated ship's bridge for Chevron tankers.

Evaluating and Monitoring Maritime Risk: Prince William Sound, Alaska

April 1995 to June 1997

2 year contract from ARCO Marine Inc., BP Oil Shipping Company, Chevron, SeaRiver Maritime, Inc., Tesoro, Prince William Sound Regional Citizens Advisory Council, State of Alaska Department of Environmental Conservation, and U.S. Coast Guard to conduct risk assessment of oil transportation system in Prince William Sound, Alaska (with Det Norske Veritas and J. Harrald, T. Mazzuchi/GWU) using vessel traffic and environmental simulation coupled with accident and incident data analysis. Research investigated role of human and organizational error in large-scale systems.

Shipboard Manning Model Evaluation

February 1994 to June 1997

3 year contract from U.S. Coast Guard Research and Development Center, Avery Point, CT (as part of Coast Guard Research, Development, Test and Evaluation of Human Factors contract) to develop, evaluate and test a decision support system for determining shipboard manning levels.

Research, Development, Test and Evaluation of Human Factors

September 1994 to August 1999

5 year task order contract from the U.S. Coast Guard Research and Development Center, Avery Point, CT (with Battelle Human Factors Research Group).

Oil Pollution Research Grant

August 1994 to August 1995

1 year grant from U.S. Department of Transportation, Volpe National Transportation Systems Center, Cambridge, Massachusetts to develop St. Lawrence Seaway piloting expert system prototype.

Human Factors in Maritime Shipping

March 1994 to October 1994

7-month contract from Prince William Sound Regional Citizens Advisory Committee and Cook Inlet Regional Citizens Advisory Committee to assess the role of human and organizational error in maritime operations in Alaska (with Battelle Human Factors Research Group).

Evaluating and Monitoring Maritime Risk: Port of New Orleans

March 1994 to May 1995

1 year contract from State of Louisiana to evaluate maritime risk of gaming boat operations in Port of New Órleans (with J. Harrald, T. Mazucchi/George Washington University) using vessel traffic simulation coupled to accident analyses.

Shipboard Evaluation of Embedded Piloting Expert System

December 1993 to May 1995

1 year contract from U.S. Coast Guard R&D Čenter to evaluate an embedded real-time knowledge based system embedded within a real-time integrated bridge system.

Oil Spill Prevention Plan Review

December 1993 to March 1994

3-month contract from State of Washington, Office of Marine Safety, to develop a methodology for oil spill prevention plan reviews (with J. Harrald, T. Mazucchi/GWU).

Oil Spill Response Information System Design

July 1993 to March 1994

9-month contract from US Coast Guard R&D Center, (with Marine Safety International).

Evaluating and Monitoring Maritime Risk: Puget Sound

April 1993 to March 1994

1 year contract from State of Washington, Office of Marine Safety to conduct risk assessment and develop vessel screening decision support system (with J. Harrald, T. Mazucchi/GWU).

RESEARCH PROJECTS AND GRANTS, continued

On Scene Coordinators' Decision Making Training Objectives

Becember 1992 to July 1993

8-month contract from US Coast Guard R&D Center, (with J. Harrald/GWU, T. Hammel, Marine Safety International).

Decision Support through Three Dimensional Imaging in a Tactical Command and Control Environment

November 1991 -1993
Two year contract from Rome Laboratories/Air Force Systems Command (with W.A. Wallace) to investigate three dimensional and virtual imaging for command and control.

Development, Evaluation and Test of a Shipboard Piloting Expert System

Evaluation and Test of a Shipboard Piloting Expert System

Evaluation and Test of a Shipboard Piloting Expert System

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Evaluation and Evaluation

October 1989 to August 1993

Four year contract from US Department Transportation, Maritime Administration.

January 1986 - December 1987

Development and Evaluation of a Piloting Expert System

2 year contract from US Department of Transportation, Maritime Administration (MARAD).

Development of a Case-Based Management Information Systems Curriculum 2 year contract from GE Foundation for MIS curriculum development.

May 1990 - December 1992

PUBLICATIONS

Google Scholar citations: https://scholar.google.com/citations?user=zlX7W5EAAAAJ&hl=en (3312, as of 9/19/2023)

Researchgate: https://www.researchgate.net/scientific-contributions/12161068 Martha Grabowski

BOOKS—AUTHORED, EDITED, NATIONAL ACADEMIES COMMITTEE REPORTS/LEADERSHIP

- The Coast Guard's Next Decade: An Assessment of Emerging Challenges and Statutory Needs. 2023. Washington, D.C.: National Academies of Science, Engineering & Medicine, April (committee member). https://doi.org/10.17226/27059
- Ames, C.A., Grabowski, M., Kaefer, F., Mora, G. & Nath, R. 2022. <u>Jesuit Perspectives: Resources for Teaching Analytics, Business Intelligence and Information Systems.</u> Ignited: The Global Jesuit Case Series Platform.
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- <u>Improvements to U.S. Coast Guard Stability Regulations.</u> 2018. Washington, D.C.: National Academies of Science, Engineering & Medicine. Transportation Research Board Special Report 328, August, report to U.S. Coast Guard (committee member).
- <u>Impediments to U.S. Flag Ship Registry</u>. 2016. Washington, D.C.: National Academies of Science, Engineering & Medicine. Letter report to U.S. Coast Guard (committee member).
- Responding to Oil Spills in U.S. Arctic Marine Environments. 2014. Washington, D.C.: National Academies Press (committee chair).
- <u>Safe Navigation in the U.S. Arctic: Summary of a Conference.</u> 2012. Washington, D.C.: Transportation Research Board, October. (Planning committee member)
- <u>Naval Engineering in the 21st Century: The Science and Technology Foundation for Future Naval Fleets.</u> 2011. Washington, D.C.: National Academy Press (committee chair).
- Tsunami Warning & Preparedness: An Assessment of the U.S. Tsunami Program and the Nation's Preparedness Efforts. 2011. Washington, D.C.: National Academy Press (committee vice chair).
- <u>Shipboard Automatic Identification System Displays: Meeting the Needs of Mariners.</u> 2003. Washington, D.C.: National Academy Press (committee chair).
- Advances in Expert Systems for Management: Evaluation and Value in Knowledge-based Systems, Volume 2. 1997. (co-editor with W.A. Wallace), Greenwich, Connecticut: JAI Press.
- Advances in Expert Systems for Management, Volume 1, 1993. (Co-editor with W.A. Wallace), Greenwich, Connecticut: JAI Press.
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- Grabowski, M.R. 1993. Cases in Systems Analysis and Design, Englewood Cliffs, New Jersey: Prentice-Hall, Inc..
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- Grabowski, M.R., Martelli, P. & Roberts, K.H. 2023. <u>Reliability-Seeking Virtual Organizations at the Margins of Systems, Capacity & Resources.</u> Safety Science. 168, 106327. <u>ABDC ranking: A. Cabell's Acceptance Rate: 35% Cabell's Impact Factor: 2.84</u>
- Rowen, A., Grabowski, M. & Russell, D.W. 2022. <u>The Impact of Work Demands and Operational Tempo on Safety Culture, Motivation and Perceived Performance in Safety-Critical Systems</u>. *Safety Science*, 155, November. <u>ABDC: A Cabell's Acceptance Rate: 28% Cabell's Impact Factor: 2.84 Impact Factor 4.877, 20 of 84 in Operations Research.
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- 3. Merrick, J., Dorsey, C., Wang, B., Grabowski, M. & Harrald, J.R. 2022. Measuring Prediction Accuracy in a Maritime Accident Warning System. Production & Operations Management. 31:2, February, 819–827. ABDC: A. Cabell's Impact Factor 2.171, Acceptance Rate: 9% FT-50
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- 5. Rowen, A., Grabowski, M.R. & Rancy, J.-P. 2021. Moving and Improving in Safety-Critical Systems: Impacts of Head-Mounted Displays on Operator Mobility, Performance and Situation Awareness. International Journal of Human-Computer Systems, 150, June, 102606. ABDC ranking: B. Cabell's Impact Factor: 2.84 Cabell's Acceptance Rate: 15%
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- 7. Schad, A., Oztanriseven, F., & Grabowski, M.R. 2020. <u>The Impact of Philanthropy During Humanitarian Disasters: A Review of the Literature</u>. *Journal of Strategic Innovation and Sustainability*, 15:2, May, 168-194. Cabell's Acceptance: 14-20%
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- 9. Rowen, A.T., Grabowski, M.R. & Rancy, J-P. 2019. <u>Through the Looking Glass(es): Impacts of Wearable Augmented Reality Displays on Operators in a Safety-Critical System.</u> *IEEE Transactions on Human-Machine Systems*, 49:6, December 2019, 652-660. Cabell's Impact Factor: 2.56 Cabell's Acceptance Rate: 24% Q1: Human Factors/Engineering
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- 13. Zoli, C., Steinberg, LJ., Grabowski, M. & Hermann, M. 2018. <u>Terrorist Critical Infrastructures, Organizational Capacity and Security Risk.</u> *Safety Science.* 110, December, 121-130. <u>ABDC: A.</u> Cabell's Impact Factor: 2.84, Acceptance: 28%
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- 26. Grabowski, M.R., You, Z., Zhou, Z., Song, H., Steward, M. & Steward, B. 2009. <u>Human and Organizational Error Data Challenges in Complex, Large-Scale Systems</u>. *Safety Science*, 47:9, October, 1185-1194. <u>ABDC ranking: A.</u>
- 27. Grabowski, M.R., Ayyalasomayajula, P., Merrick, J.R., Harrald, J.H. & Roberts, K.H. 2007. Leading Indicators of Safety in Virtual Organizations. *Safety Science*. 45:10, December, 1013-1043. ABDC ranking: A.
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- 42. Van Dorp, J.R., Merrick, J.R.W., Harrald, J.R., Mazzuchi, T.A., and Grabowski, M.R. 2001. A Risk Management Procedure for the Washington State Ferries. Risk Analysis, 21:1.
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- 46. Grabowski, M.R. 1999. Distributed Intelligent Navigation Systems. Marine Technology, 36:3, July, 175-182.

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CHAPTERS IN BOOKS

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- 2. Sharkey, T.C., Braun, J., Svoboda, A., Toth, K., Tran, C., Grabowski, M. & Wallace, W.A. 2018. Dynamic Modeling of Arctic Resource Allocation (DMARA): Overview and Application to Maritime Safety in the U.S. Arctic. *Advanced Data Analytics in Command, Control and Interoperability for Homeland Security.* New York: Springer Publishing.
- 3. Brooks, J., Mendonca, D., Zhang, X. & Grabowski, M. 2017. Estimating Computational Models of Dynamic Decision Making from Transactional Data. In W. van der Aalst, J. Mylopoulos, M. Rosemann, M.J. Shaw & C. Szyperski (editors), Group Decision and Negotiation. Springer International Publishing AG: Springer Lecture Notes in Business Information Processing LNBIP. Volume 244.
- 4. Grabowski, M.R., Lepak, G. & Kulick, G. 2009. Collaborative Technology Impacts in Distributed Learning Environments. in H. Ryu and D. Parsons (editors), *Innovative Mobile Learning*, New York: Idea Group Publishing.
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- 6. Roberts, K.H. & Grabowski, M.R. 1996. Organizations, Technology and Structuring. in S. R. Clegg, C. Hardy, and W. Nord (eds.), *Handbook of Organization Studies*. London: Sage Publications Ltd., 409-423.
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- 4. Camur, M. Sharkey, T., Grabowski, M. & Dorsey, C. 2019. Dynamic Resource and Equipment Allocation for an Arctic Mass Rescue Event. *Proceedings of the INFORMS Computing Society (ICS) 2019*, Knoxville, TN, 6-8 January 2019.
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- 6. Brooks, J., Mendonca, D., Zhang, X. & Grabowski, M. 2016. Estimating Computational Models of Dynamic Decision Making from Transactional Data. *Proceedings of the Group Decision and Negotiation Conference GDN 2016,* Western Washington University, Bellingham, WA, 20-24 June.
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- 12. Tyshchuk, Y., Hui, C., Grabowski, M.R. & Wallace, W.A. 2012. Social Media and Warning Response Impacts in Extreme Events: Results from A Naturally Occurring Experiment. *Proceedings of the 45th Hawaii International Conference on System Sciences (HICSS-45)*, Maui, Hawaii, 4-7 January.
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- 19. Roberts, K.H. & Grabowski, M.R. 2002. Coordinating at the Interstices: Improving Reliability in Health Care. *Symposium on Coordination of Expertise in High Reliability Work Environments*. Academy of Management Meetings, Denver, Colorado, 9-12 August.

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- 20. Bayrak, T. & Grabowski, M.R. 2002. Real-time Safety-Critical Wide Area Networks. *Proceedings of the Americas Conference on Information Systems*, Dallas, Texas, 9-11 August.
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- 22. Bayrak, T. & Grabowski, M.R.. 2002. Safety-Critical Wide Area Network Performance Evaluation. *Proceedings of the European Conference on Information Systems, ECIS 2002,*, Gdansk, Poland, 6-8 June.
- 23. Coskun, E. & Grabowski, M.R. 2002. Two Perspectives of Intelligence Complexity in Embedded Intelligent Real-Time Systems. *Proceedings of the International Conference on Fuzzy Sets and Soft Computational Intelligence in Management and Industrial Engineering (FSSCIMIE 2002)*, Istanbul, Turkey, 29-31 May.
- 24. Harrald, J.R., Mazzuchi, T.A., van Dorp, J. R., Merrick, J.R. & Grabowski, M. 2001. A Collaborative Risk Management Procedure for the Washington State Ferries. *Proceedings of the Society for Risk Analysis Annual Meeting*, 2-5 December.
- 25. Bayrak, T. & Grabowski, M.R. 2001. Evaluation of Safety-Critical Wide Area Networks. *Proceedings of the Americas Conference on Information Systems 2001*, Boston, Massachusetts, 3-5 August.
- 26. Coskun, E. & Grabowski, M.R. 2001. An Application of Relative Complexity Metrics to Study Software Complexity to Study Software Complexity in Embedded Intelligent Real-Time Systems. *Proceedings of the International Conference on Intelligent Systems in Manufacturing*, 24-25 May, Sakarya University, Adapazari, Turkey.
- 27. Coskun, E. & Grabowski, M.R. 2000. Complexity in Embedded Intelligent Real Time Systems. *International Conference on Complex Systems*, Warwick, U.K., 19-20 September.
- 28. Coskun, E. & Grabowski, M.R. 1999. Complexity in Embedded Intelligent Real Time Systems," Research in Progress paper, *International Conference on Information Systems*, Charlotte, North Carolina, December.
- 29 .Hanamantharao, S. & Grabowski, M.R. 1996. Impact of a Distributed Intelligent System in a Large Scale Safety Critical System," Research in Progress paper, *International Conference on Information Systems*, Cleveland, Ohio, December.
- 30. Grabowski, M.R. 1989. Decision Aiding Technology and Integrated Bridge Design. *Proceedings of the Society of Naval Architects and Marine Engineers Ship Technology and Research Symposium*, New Orleans, 12-15 April, S5-3-1 to S5-3-11.
- 31. Grabowski, M.R. 1988. Knowledge Acquisition Methodologies: Survey and Assessment. *Proceedings of the Ninth International Conference on Information Systems*, Minneapolis, 30 November 3 December.

CASE STUDIES

1. Grabowski, M.R. & Orne, D. 2015. Quantra. Global Jesuit Case Series. http://www.gics.org/cases/business/bus-00021, retrieved 1 December 2022.

EDITORIALLY REVIEWED CONFERENCE PROCEEDINGS

- 1. Chellaiah, S. & Grabowski, M.R. 2015. Corporate Social Responsibility in India and the United States. *Proceedings of the International Conference on Organization and Management, Abu Dhabi, 22-23 November.*
- 2. Garrett, R., Sharkey, T., Grabowski, M. & Wallace, W.A. 2015. Challenges in Dynamic Modeling for Large-Scale Resource Allocation. *ICS 2015, INFORMS Computing Society Conference*, Richmond, Virginia, 11-13 January.
- 3. Garrett, R., Sharkey, T., Grabowski, M. & Wallace, W.A. 2014. Dynamic Modeling for Arctic Resource Allocation. *INFORMS Conference*, INFORMS, San Francisco, 9-12 November.
- 4. Choo, A. & Grabowski, M.R. 2011. Risk Communication and Safety Efficacy in Shipping: A Multilevel Analysis," *INFORMS Conference*, INFORMS, 13 November.
- Grabowski, M.R. 2005. Impacts of Next Generation Ship Navigation and Communication Systems. Proceedings of the 4th International Conference on Computer Application and Information Technology in the Maritime Industries (COMPIT '05). Hamburg, Germany, 8-11 May.
- Grabowski, M.R. 2002. The Future of Bridge and Navigation Systems. Proceedings of the Nautical Institute Workshop on Integrated Bridges. London, United Kingdom: The Nautical Institute, 13-14 November, pp. 10-1 to 10-8.
- 7. Grabowski, M.R. 2002. Navigational Aids and the Human Element: The Intelligent Bridge. *Proceedings of the Safer Seas: Marine Safety and Environmental Protection Conference*, 11-12 March, Brest, France.
- 8. Harrald, J.R., Mazzuchi, T.A., Merrick, J., Spahn, J., Van Dorp, R., & Grabowski, M.R. 1998. Waterway Risk Assessment Using System Simulation and Expert Judgment. *Proceedings of the 29th International Association of Navigation Congresses*. The Hague, Netherlands, July.
- Fowler, T., Harrald, J. & Grabowski, M. 1997. Overview of the Prince William Sound Risk Assessment Project. Proceedings
 of the Institute of Marine Engineers Conference. London: 17-18 May.
- 10. Grabowski, M.R. & Roberts, K.H. 1995. Risk Mitigation and Risk Migration in Large Scale Systems. *Academy of Management Annual Meeting*, Vancouver, B.C., 9 August.
- 11. Moore, W.H., Bea, R.G., Grabowski, M.R. & Roberts, K.H. 1995. Managing Human and Organizational Error Through the Life Cycle of Offshore Marine Systems. *Proceedings of the Offshore Mechanics and Arctic Engineering Conference 1995*, Copenhagen, Denmark, 18-22 June.
- 12. Roberts, K.H. & Grabowski, M.R. 1994. Some Requirements for Designing and Managing Reliable Complex Systems. Proceedings of PSAM II, International Conference on the Advancement of System-based Methods for the Design and Operation of Technological Systems, San Diego, 20-24 March.

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- 13. Lee, J.D., Sanquist, T.F., & Grabowski, M.R. 1994. Development of a Computer-Based Model to Estimate the Staffing Needs of Commercial Ships. Proceedings of the Prevention, Response, and Oversight: Five Years after the Exxon Valdez Oil Spill Conference, Anchorage, Alaska, 23-25 March, 101-110.
- 14. Hendrick, H.W. & Grabowski, M.R. 1992. Cross Cultural Validation of a Function Analysis Model for Determining Minimal Safe Crew Size on Maritime Vessels. *Proceedings of the 36th Annual Meeting of the Human Factors Society*, Atlanta, Georgia, 12-16 October.
- 15. Hendrick, H.W. & Grabowski, M.R. 1992. A Process for Developing Functional Generic Models for Determining Personnel Requirements. Proceedings of the 36th Annual Meeting of the Human Factors Society, Atlanta, Georgia, 12-16 October.
- 16. Jessen, D., Grabowski, M.R., Triscari, T. & Wallace, W.A. 1992. A Test of Stereoscopic Imaging in a Tactical Command and Control Decision Situation. *Proceedings of the 1992 Symposium on Command and Control Research*, Naval Postgraduate School, Monterey, California, 10-11 June. McLean, Virginia: Science Applications International Corporation, Information Systems Division, 85-99.
- 17. Hendrick, H.W. & Grabowski, M.R. 1990. Macroergonomic Considerations in Determining Minimum Safe Crew Size on Maritime Vessels. *Proceedings of the 34th Annual Meeting of the Human Factors Society*, Orlando, Florida, 8-12 October.
- 18. Grabowski, M.R.. 1988. Smart Charts: The Next Step for Piloting Expert Systems? *Proceedings of the US Hydrographic Conference '88*, Baltimore, 12-15 April, 194-203.

REPORTS, ARTICLES, AND NON-REFEREED CONFERENCE PROCEEDINGS

- 1. Sharkey, T.C., Birkland, T., Grabowski, M., Lowe, M. & Wallace, W.A. 2019. <u>Breaking the Ice: ISE to Play Key Role in Shaping Arctic's Future</u>. *Institute of Industrial & Systems Engineers*, November.
- 2. Dorsey, C. Wang, B. & Grabowski, M. 2018. Department of Homeland Security (DHS)/US Coast Guard Data Risk Analytics Final Report: Literature Review, Requirements, Analysis & Recommendations for Data Sources and Analytical Methodologies. U.S. Department of Homeland Security, Command, Control & Interoperability Center for Advanced Data Analysis (CCICADA) Report, Task Order Task Order HSCG23-17-J-MSR065, August.
- 3. Grabowski, M.R., Sharkey, T.C., Wallace, W.A. & Garrett, R. 2015. Dynamic Modeling for Arctic Resource Allocation (DMARA) Oil Spill Response Module, Phase 2 Report. U.S. Department of Homeland Security, Command, Control & Interoperability Center for Advanced Data Analysis (CCICADA), 8 October 2015.
- 4. Van Dorp, J.R., Harrald, J.R., Merrick, J.R.W.& Grabowski, M.R. 2012. <u>Assessment of Oil Spill Risk due to Potential Increased Vessel Traffic at Cherry Point, Washington.</u> Washington, D.C.: The George Washington University, February 2009. Report submitted to U.S. Army Corps of Engineers and BP Shipping, Puget Sound, Washington. Released 2012., 7 July 2014.
- Grabowski, M.R. & You, Z. 2008. ABS Leading Indicators of Safety: SeaRiver, OSG and Maersk Project Report." Houston, Texas: American Bureau of Shipping, August.
- 6. You, Z., Zhou, Z., Steward, M., Grabowski, M.R. and Song, H. 2008. <u>Puget Sound Vessel Traffic Risk Assessment Database: Description, Analysis and Human and Organizational Error.</u> United States Army Corps of Engineers, United States Coast Guard, BP Technical Report 2008, July.
- 7. Grabowski, M.R. & Wang, H. 2008. ABS Leading Indicators of Safety: Maersk Project Report. Houston, Texas: American Bureau of Shipping, Risk and Human Factors Division, June 2008.
- 8. Grabowski, M.R., Vortmann, R., Cambridge, J. & Johnson, P. 2007. <u>The Marine Board.</u> Coast Guard Proceedings. Summer 2007, 23-26., 25 July 2007.
- 9. Grabowski, M.R., Ayyalasomayahula, P. & Wang, H. 2007. *Leading Indicators of Tanker Safety*. Houston, Texas: American Bureau of Shipping, Guidance Note, August.
- 10. Gray, D.L, Michel, K. Eitken, D. & Grabowski, M.R. 2005. <u>Tug Escorts in Puget Sound.</u> Washington State Department of Ecology, Olympia, Washington. 25 February.
- 11. Grabowski, M.R. & Dhami, H. 2004. St. Lawrence Seaway AIS Performance Impact Study. Prepared for the St. Lawrence Seaway Development Corporation, March 2004.
- 12. Grabowski, M.R. 199. Risk in the 21st Century Marine Transport System. Transportation Research News, July/August 1999.
- 13. Harrald, J.R., van Dorp, J.R., Mazzuchi, T.M., Grabowski, M.R., & Merrick, J. 1999. *Washington State Ferries Risk Assessment: Final Report*. Olympia, Washington: Blue Ribbon Panel of Washington State Ferries Safety, Washington State Department of Transportation, June.
- 14. Mohan, R., Lo, C., Kwong, C., Lo, M., Coskun, E., Hamzah, R., Lin, B., Bahsin, S., Yesiloglu, M. & Grabowski, M.R. 1998. Washington State Ferries Risk Assessment Project, Puget Sound Accident-Incident Database Requirements and Design Document. Olympia, Washington: Blue Ribbon Panel on Washington State Ferries Safety, Washington State Transportation Commission, December.
- 15. Grabowski, M.R. 1997. Risk Evaluation of Passenger Ship Traffic in the Port of Houston. Houston, Texas: Port of Houston Authority. September.

REPORTS, ARTICLES, AND NON-REFEREED CONFERENCE PROCEEDINGS, continued

- 16. Grabowski, M.R. Safety Brokering: Seven Lessons Learned for Maritime Safety. Proceedings of the Marine Safety Council. Washington, D.C.: U.S. Coast Guard, 54:3, July 1997, 12-17.
- 17. Harrald, J.H., Mazucchi, T.M., Grabowski, M.R., Saebo, E., and Hutton, M. Prince William Sound Risk Assessment Final Report. Cleveland, Ohio: BP Oil Shipping Company, USA, December 1996.
- 18. Kelton, K. and Grabowski, M.R. Navigation and Piloting Expert Syst\em Functional Requirements. Department of Defense, Advanced Research Projects Agency/Lockheed Martin Technical Report, 15 April 1996.
- 19. Grabowski, M.R. *Prince William Sound Oil Transportation System Description*. Rensselaer Polytechnic Institute, Department of Decision Sciences and Engineering Systems Technical Report, 31 January 1996.
- 20. Grabowski, M.R., "Evolution of Intelligent U.S. Piloting Aids," *Proceedings of the 20th U.S.-Japan Marine Facilities Conference*, Washington, D.C., 25 September 1995.
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- 22. Grabowski, M.R., "Systems Can Mean Safety," *Proceedings of the Marine Safety Council.* Washington, D.C.: U.S. Coast Guard, 52:4, September/October 1995, 59-62.
- 23. Grabowski, M.R., "Minding the Helm." *Proceedings of the Marine Safety Council.* Washington, D.C.: U.S. Coast Guard, 52:3, May/June 1995, 10-11.
- 24. Harrald, J.R., Mazzuchi, T., and Grabowski, M.R. Evaluating and Monitoring Maritime Risk: The Lower Mississippi River. New Orleans, Louisiana: The Board of Commissioners of the Port of New Orleans. Final Report, May 1995.
- 25. Harrald, J.R., Mazzuchi, T., and Grabowski, M.R. Evaluating and Monitoring Maritime Risk: The Development of a Vessel Risk Model for Puget Sound and the Straits of Juan de Fuca. Olympia, Washington: State of Washington, Office of Marine Safety. Final Report, January 1994.
- 26. Sanquist, T.F. and Grabowski, M.R. *Alaska Maritime Human Factors Needs Assessment*. Anchorage, Alaska and Valdez, Alaska: Cook Inlet and Prince William Sound Regional Citizens Advisory Committees, 23 September 1994.
- 27. Seigel, S., Grabowski, M.R., and Case, J. Conceptual Design for a USĆG Multi-Agency Response Tactical Action Display (MARTAD) System. Washington, D.C.: U.S. Coast Guard Research and Development Center, Report No. MSI/CAORF 60-9056-01, August 1994.
- 28. Grabowski, M. and Sanborn, S. The Shipboard Piloting Expert System: Final Report, Volumes 1 (Final Report), 2 (Phase 1 Final Report) and 3 (SPES Shipboard Evaluation Plan), U.S. Department of Transportation, Maritime Administration, Report Nos. MA-RD-840-93003, 93004, and 93005, May 1994.
- 29. Seigel, S., Harrald, J. R., Grabowski, M.R., Hammel, T. Final Report: Decision Making Training Alternatives for Marine Spill Response Command Post Personnel Washington, D.C.: U.S. Department of Transportation, U.S. Coast Guard, Report No. MSI/CAORF 60-9051-01A, January 1994.
- 30. Grabowski, M. U.S. Coast Guard Multi Agency Response Tactical Action Display (MARTAD) System, Task A: Prototype System Concepts, Department of Decision Sciences and Engineering Systems Technical Report 37-93-333, December 1993.
- 31. Wilkinson, J., Ramaswamy, S., Grabowski, M., Harrald, J., and Mazzuchi, T. Evaluating and Monitoring Maritime Risk: Causal Analysis of Oil Spills in State of Washington Waters. Department of Decision Sciences and Engineering Systems, Technical Report 37-93-249, July 1993.
- 32. Grabowski, M. Evaluating and Monitoring Maritime Risk: Literature Review and Analysis. Department of Decision Sciences and Engineering Systems, Technical Report 37-93-248, 31 May 1993.
- 33. Grabowski, M., On Scene Commander/Rapid Response Team Decision Making Training Objectives. Avery Point, Connecticut: U.S. Department of Transportation, Coast Guard Research and Development Center, May 1993.
- 34. Ramaswamy, S., and Grabowski, M.R., Summary of Responses to the Committee on Advances in Navigation and Piloting's Letter of Inquiry, unpublished contract report to the Marine Board, National Research Council, Washington, DC, July 1992.
- 35. Grabowski, M., *The Shipboard Piloting Expert System: Simulator and Shipboard Evaluation Plan*, Department of Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute, Technical Report 37-92-380, July 1992.
- 36. Grabowski, M., *The Shipboard Piloting Expert System: Shipboard Implementation and Evaluation Plan*, Department of Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute, Technical Report 37-91-265, April 1991.
- 37. Grabowski, M., Sanborn, S., and M. Dowd, *The Shiphoard Piloting Expert System: Phase 1 Interim Technical Report*, Department of Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute, Technical Report 37-91-279, August 1991.
- 38. Grabowski, M. and Sanborn, S. *The Shipboard Piloting Expert System: Design Report*, Department of Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute, Technical Report 37-90-245, June 1990.
- 39. Grabowski, M., Dowd, M., and Sanborn, S., *The Shiphoard Piloting Expert System: Functional Requirements Document*, Department of Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute, Technical Report 37-90-229, March 1990.
- 40. Grabowski, M. The Piloting Expert System: Decision Support to Masters, Pilots, and Mates on Watch at Sea and in Close Waters: Technical Report and User's Manual, US Department of Transportation, Maritime Administration, Reports No. MA-RD-840-88008 and 88009, March 1988.

COMPLETED WORKING PAPERS--PAPERS UNDER REVIEW, REVISION

- 1. Cho, L., Sharkey, T.S., Lowe, M., Grabowski, M.R., Birkland, T.A. & Wallace, W.A. 2024. Convergent Approaches to Understand the Impact of Infrastructure Development on Arctic Communities and Emergency Response: A Case Study on the Port of Nome, to be submitted to *PLOSOne*, October 2023. Impact Factor: 3.7, Q1 Engineering.
- 2. Morgan, G., McGarvey, J., Grabowski, M. & Hillhouse, N. 2023. Accessible Multimodal Emergency & Disaster Response Technology in Remote Settings: Augmented Reality, Generative AI and Uncrewed Aerial Systems. *Proceedings of the Hawaii International Conference on Systems Sciences (HICSS-57)*, Honolulu, Hawaii, 3-6 January 2024. Submitted 15 June 2023.
- 3. McKeown, B., Salupo, S., Grabowski, M.R., Sipple, J., Lance, R., Jarrett, J. & Russell, D. 2022. Looking Astern & Forward: Automating Machine Classification, Precursor Identification and Sentiment Analysis of Unstructured Data in Safety-Critical Systems. Submitted to *TransNav, The International Journal On Marine Navigation and Safety of Sea Transportation,* July 2022.

PROFESSIONAL AND PUBLIC LECTURES (In Person, On-Line and Hybrid)

Invited presentations

- 1. Arctic Operations and Autonomy. 2022. Society of Naval Architects and Marine Engineers Polar Symposium. Houston, Texas, 26-29 September 2022 (Remote).
- 2. <u>Looking to the Future: Arctic Research Gaps.</u> 2021. US Coast Guard Maritime Risk Symposium. University of Houston College of Technology, 2-4 November 2021. (Remote).
- 3. The Future of Maritime Education, Training, Research and Innovation (On Line) 2020. U.S. Department of Transportation, Maritime Administration. 9 November 2020 (Chair and host for 6-hour on-line, real-time 200-participant Summit, and interactive senior leadership roundtable). National Academies of Science, Engineering & Medicine, Transportation Research Board, Marine Board.
- **4.** Unmanned Aerial Systems in Global Logistics and Emergency Response. (*In Person*). 2020. Invited presentation, Woman in Machine Learning and Data Science, Syracuse, New York, 4 February.
- 5. Navigation Technology and Human Factors: Augmented Reality Applications. (*In Person*). 2019. Invited presentation, National Academies/U.S. Coast Guard Maritime Risk and Security Conference, State University of New York Maritime College, Fort Schuyler, NY, 13 November.
- **6.** Safety Culture. (In Person). 2017. Invited presentation, National Academies Transportation Research Board Ferry Transportation and Marine Safety & Human Factors Committees Joint Mid-Year Meeting, Whitehall Terminals, Staten Island Ferry, NY, 12 May.
- 7. GlassNav: Wearable Immersive Augmented Reality for Ship Navigation. (In Person). 2017. Invited presentation, Ferry Safety & Technology Conference, Pier A, Harbor House, New York, NY, 11 May.
- The Role of Wearable Immersive Augmented Reality (WIAR) Systems in Ship Navigation. invited presentation, E-Navigation Underway 2015 Conference, State University of New York Maritime College, Ft. Schuyler, NY, 28-30 September 2015.
- 9. Safety Culture in Marine Transportation. invited presentation, National Transportation Safety Board, Sept 11, 2013.
- 10. High Reliability Virtual Organizations: Transformational Leadership and the Ignatian Pedagogical Paradigm. Invited presentation, Lockheed Martin Leadership Academy, Lockheed Martin Information Systems and Global Solutions, Baltimore, Maryland, 25 January 2012.
- 11. Embedding a Risk Management Culture. U.S. Coast Guard Missions Conference, World Maritime Day Celebration, Tampa, Florida, 28 October 2011.
- 12. Challenges for Maritime Human Factors in the 21st Century. Keynote address to ERGOShip Conference on Maritime Human Factors, Goteburg, Sweden, 14-16 September 2011.
- 13. Highly Reliable Crisis and Disaster Systems. Keynote address to the 6th International Conference on Information Systems for Crisis Response and Management, ISCRAM '09, Gothenburg, Sweden, 8-13 May 2009.
- 14. Leading Indicators of Safety in Virtual Organizations. Keynote address. SINTEF, Norwegian Foundation for Scientific and Industrial Research, Symposium on Human Factors and Control, Halden, Norway, 19-20 April 2006.
- 15. Early Adoption of Technology Performance Impacts: AIS on the St. Lawrence Seaway. *Marine Transportation Systems Research and Development Technology Conference*, Washington, D.C., 15-17 November 2004.
- 16. Display of AIS Information. International Association of Lighthouse Authorities Workshop on Training the VTS Operator for the AIS World, Rotterdam, the Netherlands, 3-7 February 2003.
- 17. The Future of Integrated Bridge Systems. *Integrated Bridge and Navigation Systems—User Enhanced Designs.* Conference of the Nautical Institute. London, 13-14 November 2002.
- 18. Navigation Aids and the Human Element: The Intelligent Bridge. Safer Seas: Conference on Marine Safety and Environmental Protection, University of West Brittany, Brest, France, 11-12 March 2002.

PROFESSIONAL AND PUBLIC LECTURES

Invited presentations, continued

- 19. Teaching Effectiveness: What Works? What Doesn't? Maine Maritime Academy Teaching Effectiveness Roundtable, Castine, Maine, 26 February 2002.
- 20. Risk Mitigation in Complex Systems. 21st Century Driver and Truck Alliance Roundtable on Risk Taking and Systems Accidents, American Trucking Associations, Arlington, Virginia, 1 August 2000.
- Performance Evaluation of Embedded Intelligent Ship Control Systems. U.S. Office of Naval Research Workshop on Intelligent Ships, Navy Center for Applied Artificial Intelligence and U.S. Office of Naval Research, Washington, D.C., 6 March 2000.
- 20. Distributed Intelligent Navigation Systems. Forum Captain Computer II, Hamburg, Germany; Workshop on Artificial Intelligence and Optimization for Marine Applications, Institute fur Schiffbau Hamburg, Germany, 29 January 1999.
- 21. The Marine Information Highway: Intelligent Real Time Bridge Systems. U.S.-Canadian Safe Marine Transportation (SMART) Forum, Vancouver, British Columbia, 11-12 June 1998.
- 22. Accidents, Incidents, and Lessons Learned for Maritime Safety. American Petroleum Institute's Workshop on Enhancing Maritime Safety. New Orleans, Louisiana, 26 June 1997.
- 23. Hydrographic Charting for U.S. Ports and Waterways. Testimony before U.S. House of Representatives, Subcommittee on Fisheries Conservation, Wildlife, and Oceans. Washington, D.C., 24 April 1997.
- 24. The Prince William Sound Risk Assessment Project. *Annual British Petroleum Safety Conference*. Skytop Lodge, Skytop, Pennsylvania, 23 April 1997.
- 25. Mitigating Human and Organizational Risk. Biannual Meeting of the American Petroleum Institute, Washington, D.C., 8 October 1996.
- 26. Development and Evolution of Intelligent Piloting Systems. National Transportation Safety Board Forum on Integrated Bridges, Reston, Virginia, 5-6 March 1996.
- 27. Evolution of Intelligent U.S. Piloting Aids. 1995. 20th Meeting of the U.S.-Japan Marine Facilities Panel, Washington, D.C., 25 September
- 28. Minding the Helm: Advances in Marine Navigation and Piloting. British Columbia/States Oil Spill Task Force Annual Meeting, San Diego, California, 18 July 1995.
- 29. Handling Oil in the Modern World: A Systems Approach. Establishing Quality Spill Prevention Systems Conference, U.S. Coast Guard/State of Washington Office of Marine Safety, Seattle, Washington, 3 November 1994.
- 30. Evaluating Human and Organizational Error: What Can Be Done? Prevention First: California State Lands Commission Oil Spill Prevention Conference, Long Beach, California, 22 September 1994.
- 31. The State Maritime Academies: Where Should They Be Going? Massachusetts Maritime Academy Board of Visitors, Boston, Massachusetts, 7 June 1994.
- 32. Human Factors in the Maritime Industry--A Research Perspective. U.S. Coast Guard/State of Washington West Coast Conference on Human Factors, Seattle, Washington, 19 November 1993.
- 33. Decision Support and Organizational Forms in High Velocity Environments. Hong Kong University of Science and Technology, 12 November 1993.
- 34. Maritime Industry--Aerospace Technology Transfer Opportunities. US Department of Transportation, Maritime Administration, Ship Operations Cooperative Program conference, Baltimore, 8 October 1992.
- 35. Shipboard Manning: How Low Can You Go?. MIT International Shipping Colloquium series, Boston, 24 Sept 1992.
- 36. Human and Organizational Error in Maritime Systems: Piloting and Human Resource Allocation Modeling. presentation at Fourth BiAnnual Meeting of the Human and Organizational Error Program, University of California at Berkeley, 17-18 August 1992.
- 37. An Application of Expert Systems Technology: The Shipboard Piloting Expert System. Invited panel on Technological Advances in the Management of Hazardous Materials Transportation, Spring ORSA/TIMS meeting, Ft. Lauderdale, Florida, 29 April 1992.
- 38. Shipboard Navigation and the Human Factor. US Coast Guard, Directorates of Merchant Vessel Personnel (M), Navigation (N) and Engineering, Research and Development (ERDA), 24 April 1992 and to National Transportation Safety Board, Washington, DC, 24 April 1992.
- 39. Prevention of Maritime Casualties: The Role of Technology. Oil Pollution Act of 1990 (OPA-90) Research and Development Advisory panel meeting, Kings Point, New York, 3 March 1992.
- 40. The Advent of Second Generation Expert Systems. Closing address, American Association of Librarians, Washington, DC, 17 October 1990.
- 41. Who Should Build Expert Systems--Knowledge Engineers or Experts? Association for Information Systems Technology dinner meeting, Syracuse, New York, 15 November 1989.
- 42. Knowledge Acquisition for Management. Expert Systems for Management Conference, Syracuse University, 26 October 1989.

PROFESSIONAL AND PUBLIC LECTURES

Invited presentations, continued

- 43. Challenges for Second Generation Expert Systems. Northern Illinois University Graduate Colloquium Series, DeKalb, Illinois, 17-18 July 1989.
- 44. Piloting and Navigation Expert Systems. Presentation to the National Academy of Sciences, Marine Board, New Orleans, 15 June 1989.
- 45. Methodological Issues in Expert Systems: Knowledge Acquisition. CORS/ORSA/TIMS, Vancouver, British Columbia, 8-10 May 1989.
- 46. Artificial Intelligence and Expert Systems. Society of Logistics Engineers, Garden City chapter, Garden City, New Jersey, 19 April 1988.

MEDIA EVENTS, WEBINARS, CITATIONS, PUBLIC TESTIMONY

M.Grabowski, Le Moyne College Faculty Highlights, YouTube, December 2020.

2022. <u>Invited Testimony</u>. House Transportation & Infrastructure Committee, Subcommittee on Coast Guard & Maritime Infrastructure hearing on **U.S. Coast Guard Arctic Leadership on Safety, Security & Environmental Responsibility**, Washington, D.C., 7 December 2022.

National Academies of Science, Engineering & Medicine (NASEM), Transportation Research Board, Marine Board.

2022. Host, Chair. 2-day, 12 hour *in-person and on-line* keynote, presentations, panels and discussion, on 'Diversity, Equity & Inclusion in Marine Transportation,' National Academies' Beckman Center, Irvine California. Keynote by Deputy Secretary of Transportation Polly Trottenberg; Panel presentation with Acting Maritime Administrator Lucinda Lessley (on-line); RADM John Mauger, USCG (on-line); RADM Nancy Hahn, NOAA; and 4 panels of 5-6 speakers, discussion sessions. Technical tour of Port of Los Angeles/Long Beach & AltaSea, Port of Los Angeles, 5-7 April 2022.

2021. Host, Program Chair. 2-day, 12 hour *on-line* panels and discussion, on 'Toward Decarbonization: The Future of Marine Energy and Propulsion,' hosted for U.S. Department of Energy, U.S. Department of Transportation/Maritime Administration; U.S. Coast Guard, National Oceanic & Atmospheric Administration, U.S. Navy Office of Naval Research, U.S. Department of Interior, Bureau of Safety & Environmental Enforcement, 17-18 November 2021.

2021. Host, Chair & Emcee for 2-day, 12 hour *on-line* panel, moderated discussion, <u>Emerging Uses of the Maritime Domain</u>, U.S. Coast Guard; U.S. Department of Interior/Bureau of Safety & Environmental Enforcement, Bureau of Ocean Energy Management; National Oceanic & Atmospheric Administration; U.S. Army Corps of Engineers; 17 June.

2021. W.N. Carey, Jr. Distinguished Service Award. 2021. You Tube.

2020. Host, Chair and Emcee for 6-hour on-line real-time 200-participant <u>summit</u> and interactive <u>Senior Leadership roundtable</u>, **'The Future of Maritime Education, Training, Research and Innovation,'** for U.S. Department of Transportation, Maritime Administration (sponsor). 9 November 2020. *On Line*.

Oil Spills in the Ocean: Why the Arctic is Particularly Vulnerable. 2020. Offshore Technology. 31 January. Original article August 14, 2018.

Safer Skies, Safer Seas. 2015. Cambridge, Massachusetts: Harvard Business Review/ Analytics Review. pp. 6-7.

Continued...

MEDIA EVENTS, WEBINARS, CITATIONS, PUBLIC TESTIMONY, continued

<u>National Academies' report on Arctic Oil Spill Response</u>*. In the first week of release, the report was downloaded 1744 times. Downloads came from press releases, environmental press briefings, Congressional briefings, National Academies.org, Reuters, Twitter and RSS feeds.

Press coverage:

- --Offshore Technology, 2020, 2018. Oil Spills in the Ocean: Why the Arctic is Particularly Vulnerable, 31 January, 14 August.
- -- Alaska Dispatch News, 30 August 2017: Follow up interview on changes in Alaska and in Arctic, national oil spill response capabilities
- -- NBC News. 2014. Arctic Ship Traffic and Oil Spill Worries Rise as Ice Recedes. 28 May.
- --Alaska Public Media. 2014. What Needs to be Done to Respond to an Arctic Oil Spill? 23 April.
- --National Press briefing, Webinar, National Academies. May 2014. Coverage and interviews appeared in 60 media outlets, including National Geographic, Science, Seattle PI, Houston Chronicle, Oil & Gas Journal, and The Hill. The Houston Chronicle multiple-part series on the report ran in Emergency Management, Anchorage Daily News, and Fuel Fix.
- --Science and environmental national press interviews, May-June 2014, including National Geographic (x2), Science, Houston Chronicle, Seattle PI, Science Insider, Roll Call, The Hill, Oil & Gas Journal, RigZone, Alaska Public Media, Penn Energy, Environment News Service, Alaska Dispatch, Maritime Executive, Nature World News, MarineLink, Reuters, Chemical and Engineering News, ClimateWire, Energy National Academies' report on Arctic Oil Spill Response*, continued

Wire, Law360/Lexis-Nexis, Petroleum News, and blogs Salon, Grist, Common Dreams, Huffington Post/Politics, Blue & Green Tomorrow, American Interest.

- --Alaska community press briefing, Anchorage, Alaska, May 2014, including the Alaska Dispatch News, Anchorage Times and environmental publications
- --National Webinar, National Academies, May 2014, to brief science and environmental press on Arctic oil spill response capabilities and needs
- --Congressional briefings for Senator Murkowski (D-Alaska), Senator Begich (R-Alaska), Senate Commerce Committee, House Transportation & Infrastructure committee, House Science, Technology and Policy committee; Senate Science, Technology and Policy committee, May 2014
- -- Video presentation to Washington and national press, briefings, May 2014.
- * Responding to Oil Spills in U.S. Arctic Marine Environments. 2014. Washington, D.C.: National Academies Press (committee chair).

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Association for Information Systems (AIS)
The Institute of Management Science/INFORMS
--Secretary/Treasurer TIMS College on IS
The Institute of Electrical and Electronic Engineers
Decision Sciences Institute
Society of Naval Architects and Marine Engineers
Academy of Management

September 2000 to 2017 January 1987 to 2010 September 1992 to September 1995 February 1983 to 2014 March 1989 to 2010 February 1977 to 1998 June 2023 to present

COLLEGE, COMMUNITY, AND PROFESSIONAL SERVICE

COLLEGE SERVICE

College Service (Le Moyne College) – Business, Academic, Public Private Partnerships

Member, Faculty Senate ChatGPT/AI Task Force Faculty Representative, NCAA Division 1 Ad Hoc Task Force Faculty Athletic Affiliate, NCAA Division 2→ 1 Men's Soccer

Member, Faculty Senate, Rank & Tenure Committee Member, Faculty Senate Task Force on Academic Integrity

Member, College COVID-19 Task Force

Member, College COVID-19 Academic Continuity Task Force Member, Jesuit Fund Student Emergency/Philanthropy committee

Chair, Management, Leadership & Information Systems Department May 2023 - present

Chair, Accounting Department

McDevitt Distinguished Chair in Information Systems

Director, MS, Information Systems Program Director, Information Systems Program

Member, Quantitative Reasoning Center Advisory Board

Arts into Action, Non Profit Advisory Board Veterans Education Advisory Council

Chair, Information Systems Program Advisory Board Director, Information Systems Program Internship program

Moderator, Information Systems Club

Coordinator, Le Moyne College Health IS minor, certificate program September 2011- present

Coordinator (with Jim Joseph, Le Moyne Executive in Residence), Le Moyne College - Blue Highway LLC Partnership Coordinator, Le Moyne College – Syracuse University Global Enterprise Technology (GET) Immersion Internship program Coordinator, Le Moyne College - Syracuse University Fast Track

4+1 B.S./M.S. Information Management program

Systems Librarian Search Committee

Core Curriculum Task Force, Ex Officio Member

Director, Zogby Center for Contemporary Catholic Trends

Member, Presidential Search Committee

Member, committee to develop Pastoral Ministry program

Member, Strategic Planning Committee

Coordinator, IS program with new Computer Science major, minor

MBA Advisory Committee

Management Division Curriculum Committee Acting Chair, Accounting Department College Reorganization Committee Faculty Senate Finance Committee

Academic Vice President Search Committee Chair, Faculty Senate Academic Policies and

Procedures subcommittee evaluating administrators (Academic Vice President) Spring 1996 Heights Project Steering Committee (college self assessment)

Faculty Senate, Professional Rights and Welfare Committee

Enrollment Management Advisory Board Middle States Self Study Steering Committee

Le Moyne College Judicial Board Student Life Advisory Board

Biology department curriculum review committee

Le Moyne College Elderhostel

January 2023 - present

May – September 2022, Jan - May 2023

November 2021 - present

July 2021 – May 2022 (Fall 2022 sabbatical)

January 2021 -May 2021 March 2020 - 2021 March 2020 - 2021 March 2020 - present

August 2020 – January 2023 September 2014 - present February 2014 – 2020 September 2001 – present

September 2017-2020 April 2017 - 2020 March 2017 – present September 2001 – present September 1991 – present

April 2015-January 2020, Sept 2023-present

September 2011 - 2013

September 2010 - 2017

September 2010 - 2021 November 2009 – May 2010 September 2009 - 2010 January 2007 - 2010 September 2007 – 2008 September 2007 - 2008 June 2007 – June 2008 September 2006 to 2008

September 2003 – August 2006 September 2004 - 2006 September 2003 – May 2004 May 1999 - March 2000 September 1997 - June 1999 October 1996 - March 1997

Fall 1992 - Spring 1993

Fall 1992 - Spring 1993

Spring 1993

May 1990 - April 1992 Fall 1989 - Fall 1992 Fall 1990 - Spring 1993 Summer 1990 Summer 1989 - 1994

COLLEGE, COMMUNITY, AND PROFESSIONAL SERVICE

COLLEGE SERVICE, continued

1. Madden School of Business / Business Department Service (Le Moyne College)

Director, Poland Center for Research & Teaching Innovation
Chair, Management, Leadership, Human Resources & IS Dept
July 2023 – present
Chair, Search Committee, Tenure Track Mgmt, Leadership, HR
Chair, Search Committee, Tenure Track Information Sys faculty
Chair, Accounting Department
Chair, Search Committee, IS Pre Doctoral Diversity Fellowship
Member, Search Committee, Professor of Practice, Accounting
Mentor, Assistant Professors of IS, Analytics, Accounting

November 2021 – present
May 2023 – present
August 2023-present
August 2020 – January 2023
October 2020 – March 2021
November 2020 – March 2021
Fall 2017 – present

Madden School of Business Committees

Chair, Member, Madden Faculty Research Committee Chair: Nov 2021 - Aug 2023; Member Aug 23+ September 2017 – May 2022 AACSB Faculty Sufficiency Committee AACSB Assurance of Learning Committee January 2016 - 2020 Madden Strategic Planning Committee October 2020 - May 2022 Madden Curriculum Committee September 2015 - present October 2020 - present Madden Dean's Council Madden Kitchen Cabinet May 2020 - 2021 October 2020 – present September 2021 – May 2022 Madden Diversity Central Task Force Madden Core Revision Task Force May 2018 – present November 2016 - 2020 Coordinator, Service Learning IT internship, Samaritan Center Coordinator – Le Moyne MSIS – Syracuse iSchool MSIS Program Director, MS, Information Systems program February 2014-May 2020

Fall 1990 - Spring 1992

Chair, Business Administration Department Fall 2009 - 2013 Fall 2001 - present Director, Information Systems program Fall 2001 – present Fall 2003 – Spring 2004 Information Systems, Business student advisor (~30 students) AACSB Instructional Resources team member MIS Concentration Coordinator Spring 1993 - 2001 AACSB Candidacy Intellectual Contributions Team Leader Spring 1998 to Spring 2000 Team Leader, Instructional Resources and Mission Accomplishment Team, AACSB Precandidacy Process Fall 1996 - Spring 1998 Business Department Resource Committee Fall 1994 -2000 Chair, Business Department Curriculum committee Fall 1992 - Spring 1993

2. Master's Theses (MSIS) (Le Moyne College) (11 in 9 years – 2024)

Business Department Curriculum committee member

Grace Thomas Spring 2024 Spring 2024 Jimmy McGarvey Spring 2022 Gwendolyn Morgan (MBA) Brent McKeown Spring 2021 (COVID year) Spring 2019 Trevor Thompson Spring 2019 Necdet Gurkan Spring 2018 Irfan Tihic Spring 2018 Sadina Mehmedovic Jean-Philippe Rancy Spring 2017 Spring 2017 Philip Stolarski Spring 2015 Johnny Santiago

3. Undergraduate Honors in Information Systems Theses (Le Moyne College) (48 in 15 years – 2024)

Irwing Vielma Spring 2024 Nolan Hillhouse Spring 2023 (on sabbatical, Fall 2022) Jimmy McGarvey Spring 2023 (on sabbatical, Fall 2022) Diego Delgado Spring 2022 Liam Wenk Spring 2022 Ilyasah Long-Hamilton Spring 2022 Daniel Kelly Spring 2022 Spring 2021 (COVID year) Sam Salupo

<i>M</i> . (Grabowski	
Und	lergraduate Honors in Information Systems Theses (Le Moyne C Ethan Sellevold	College) (48 in 15 years – 2024; continued) Spring 2020
	Kristi Gloude	Spring 2020
	Jacqueline Greer	Spring 2019
	Rosangel Garcia	Spring 2019
	Mykayla Cleary	Spring 2019
	Greg Kelly	Spring 2018
	Sam Gangi	Spring 2018
	Anthony Brock	Spring 2018
	Alyssa Črane	Spring 2018
	Ayuen Gai	Spring 2018
	Travis May	Spring 2018
	Trevor Onori	Spring 2017
	Danny Dellaposta	Spring 2017
	Steven Middleton	Spring 2016 (on sabbatical, Fall 2015)
	Jonathan Martial	Spring 2016 (on sabbatical, Fall 2015)
	Jean-Philippe Rancy	Spring 2015
	Travis Graig	Spring 2015
	Christopher Rizzo	Spring 2015
	Nicholas Olin	Spring 2014
	James Cochran	Spring 2014
	Dara DeGennaro	Spring 2014
	Rebecca Wolf	Spring 2014
	Tyler Dygert	Spring 2014
	Joe Miller	Spring 2014
	Ashley Strazzella	Spring 2014
	Patrick Curtin	Spring 2013
	Karissa Goessel	Spring 2013
	Alex Constantino	Spring 2013
	Colin Nicol Magnel Nyesissus	Spring 2013
	Manuel Nyagisere Nour el Houda Sahraoui	Spring 2013
	Chelsea McAllister	Spring 2013
	Patrick Flake	Spring 2012
	Kathleen Calabro	Spring 2012 Spring 2012
	Sebastian Notaro	Spring 2012 Spring 2011
	Matthew Mahaffy	Spring 2011
	Richelle Lockett	Spring 2011
	Andrew Dawson	Spring 2010
	John Ganotis	Spring 2009
_		opinig 2009
6.	Doctoral Committee Service (Rensselaer)	December 2026
	Gwen Morgan, Co-Chair	
	Aaron Rowen, Co-Chair Xin Zhang, Member	December 2019 December 2019
	Yulia Tyshchuk, Member	May 2015
	James Brooks, Member	May 2014
	Zhuyu You, Co-chair	December 2010
	Huawei Song, Co-chair	May 2010
	Haiyuan Wang Co-chair	May 2008
	Premnath Ayyalasomalajula Co-chair	May 2007
	Hemil Dhami Co-chair	August 2005
	Sudhendar Hanumantharao Co-chair	August 2003
	Tuncay Bayrak Co-chair	May 2002
	Erman Coskun Co-chair	August 2001
	Diane Jessen Member	May 1998
	Steven Sanborn Co-chair	May 1995
	Sunro Lee Member	May 1993
7.	Master's Theses (Rensselaer)	
1.	LT Clare Dorsey, USCG	May 2018
	Richard Garrett	May 2016
	Tianshu Feng	January 2011
	LTJG Michael Steward, USCG	May 2007
	Jae Lee, Joseph Staats	May 1999
	J /J 1	•

8. Doctoral Committees (outside of Rensselaer):

Jean-Philippe Rancy, Syracuse University, School of Information Studies Karl Trygg Mansson, University of Tasmania, Tasmania, Australia Erika Mitchell, Syracuse University, School of Information Studies Manoj Joseph D'Souza S.J., Anna University, Faculty of Information

& Communication Engineering, Chennai, India

Stig Ole Johnsen, Norwegian Technical University, Trondheim, Norway, Andreas Aas, Norwegian Technical University, Dept of Computer & Information Science, Trondheim, Norway, September 2010

Torkel Soma, Norwegian Technical University, Trondheim, Norway, Hala Annabi, School of Information Studies, Syracuse University,

December 2023 December 2020 May 2020

August 2017 May 2012

February 2005 May 2005

COMMUNITY SERVICE

2.

City of Syracuse, Surveillance Technology Task Force

August 2021 – present August 2023 - present

Center for Urban and Applied Research Grant (Le Moyne College) Open Data Analytics (with Dllpreet Arora, Prof Yue Han, Adelphi U)

Syracuse Samaritan Center - Technology Project Coordinator, Service Learning Coordinator

Center for Urban and Applied Research Grant (Le Moyne College) May 2018 - 2022

Inventory Management System, Case Management System (2020-2021)

Giftworks Donation, Planned Giving System – Database Conversion, Migration (2019)

Volunteer Scheduling System – Requirements, Project Plan, Proposal Development (2018)

Cazenovia Area Volunteer Ambulance Corps

November 2009 - present

Dispatcher, Volunteer

U.S. Naval Academy, Blue & Gold Officer

September 2009 - 2022

- Interview and provide local contact for candidates for admission to U.S. Naval Academy
- Monitor candidate progress and coordinate admission requirements
- Provide liaison between Academy and local high schools in New York State
- Serve on Congressional Admissions Boards

Syracuse Rescue Mission Volunteer

November 2003 - 2018, 2023-present

October 1992 – October 1996

Food Service volunteer, Mail Room, Thrifty Shopper Store volunteer

St. James Church, Cazenovia, New York

Pastoral Care Area (PCA) Facilitator January 2001 – September 2010; September 2013-2023 Lead 4-parish committee consolidating 4 parish ministries/services; Diocesan planning representative

Lector, Eucharistic Minister October 1989 - present Parish Council member September 2005 - 2008 Just Faith Social justice committee member September 2003 - 2006 Finance Committee member December 1998 – June 2004 Catechist October 1995 – May 2000

Liturgy Committee member

COMMUNITY SERVICE, continued

Cazenovia Youth Athletic Association

September 2000 – 2006

- Board member (2003-2004)
- Junior high/high school recreational basketball coach (2003); Volunteer (2000 2006)

Assistant Leader

- Cazenovia Youth Soccer Association
 - Board member

January 2000 - June 2004

Referee coordinator, Registrar

April 2003 – 2006, April 2000-2002

- Cazenovia Middle School-High School PTA 9.
 - Membership Chair, Treasurer

September 2001 - August 2005, Sept 2005-2007

10. Central New York Girl Scouts

September 1998 - 2000

- 11. Burton Street Elementary School Cazenovia, New York
- 12. Green Street Middle School Cazenovia, New York
 - Volunteer, Elementary Education

September 1995 - 2000

PROFESSIONAL SERVICE

Journal Reviewer (current reviews – 2023)

Decision Sciences IEEE Transactions on Human-Computer Systems (2016-) International Journal of Human-Computer Studies Journal of Crisis and Contingency Management (2014 -)

International Journal of Intelligent Systems in Finance, Accounting, and Management

Information Technology and Decision Making

Production and Operations Management Journal of Homeland Security and Emergency Management (2014-)

Ocean Engineering (2015 -)

TransNav, International Journal of Navigation and Transportation Safety (2015-)

IEEE Transactions on Engineering Management (2016 -)

Risk Analysis (2019 -)

Accident Analysis & Prevention (2019 -)

Safety Science (2017 -) Journal of Navigation (2010 -)

Decision Analysis (2014 -)

Military Psychology (2022-)

Journal of Marine Science (2019 -)

M. Grabowski, 16 October 2023