

Yi Victor Wang, Ph.D.

Assistant Professor

Department of Emergency Management and Homeland Security

Massachusetts Maritime Academy

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EDUCATION

Ph.D.

2018

Societal Risk Management (Civil Engineering), University of Illinois at Urbana-Champaign, Urbana, Illinois, USA. Dissertation: Predicting earthquake casualty rates accounting for community vulnerability

Co-advisors: *Drs. Paolo Gardoni and Colleen Murphy*

M.S.

2014

Disaster Science and Management, University of Delaware, Newark, Delaware, USA

B.A. (Honors)

2012

Major in Applied Disaster and Emergency Studies, Minor in Geography, Brandon University, Brandon, Manitoba, Canada

B.S.

2008

Electronic Engineering, Fudan University, Shanghai, China

PROFESSIONAL APPOINTMENTS

Assistant Professor

2023–present

Department of Emergency Management and Homeland Security, Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA

Postdoctoral Fellow

2022–2023

Institute for Earth, Computing, Human and Observing, Chapman University, Orange, California, USA

Postdoctoral Fellow

2021–2022

Center of Excellence in Earth Systems, Modeling and Observations, Chapman University, Orange, California, USA

Postdoctoral Research Associate

2020–2021

Department of Geological Sciences, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

Postdoctoral Researcher

2018–2020

Department of Civil and Environmental Engineering, Jackson State University, Jackson, Mississippi, USA

TEACHING EXPERIENCE

Instructor, Department of Emergency Management and Homeland Security, Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA

Spring 2026, “**Emergency Management Capstone: Tabletop Exercise**”

Spring 2026, “**Information Technologies in Emergency Management and Operations**”
Fall 2025, “**Exercise Planning and Development**”
Fall 2025, “**Foundational Technologies in Emergency Management**”
Spring 2025, “**Emergency Management Capstone: Tabletop Exercise**”
Spring 2025, “**Information Technologies in Emergency Management and Operations**”
Fall 2024, “**Foundational Technologies in Emergency Management**”
Summer 2024, “**Emergency Management Experiential Learning**”
Spring 2024, “**Emergency Management Capstone: Tabletop Exercise**”
Spring 2024, “**Information Technologies in Emergency Management and Operations**”
Fall 2023, “**Foundational Technologies in Emergency Management**”

Advisor, Department of Emergency Management and Homeland Security, Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA
Undergraduate students 2023–present

Outside Examiner, Department of Applied Disaster and Emergency Studies, Brandon University, Brandon, Manitoba, Canada
Nnamdi Ogochukwu Komlan-Dodoh, Master of Science thesis: “Exploring Flood Risk Management and Risk Communication in Eti-Osa Local Government Area of Lagos State, Nigeria” Spring 2024

Instructor, Schmid College of Science and Technology, Chapman University, Orange, California, USA
Fall 2022, “**Earth’s Spheres and the Changing Climate**”

Mentor, Institute for ECHO, Chapman University, Orange, California, USA
Anne Willner, Undergraduate Research Assistant 2023–2023
Alexis Yankopoulos, Undergraduate Research Assistant 2022–2022

Mentor, Simon-Orange-Chapman STEM Scholars Program, Schmid College of Science and Technology and Fowler School of Engineering, Chapman University, and Orange High School, Orange, California, USA
Chariya Son, High School Student Scholar 2023–2023
Sherly Montoya, High School Student Scholar 2023–2023

Guest lecturer, Schmid College of Science and Technology, Chapman University, Orange, California, USA
Spring 2022, “**Introduction to Application in Computational Science**,” Present lectures on data analytics
Fall 2021, “**Introduction to Application in Computational Science**,” Present lectures on data analysis

Guest lecturer, Homeland Security and Emergency Preparedness, Virginia Commonwealth University, Richmond, Virginia, USA
Fall 2020, “**Risk Assessment**,” Present lecture on hazard modeling

Graduate teaching assistant, Department of Civil and Environmental Engineering, University of Illinois at Urbana–Champaign, Urbana, Illinois, USA

Fall 2017, “**Decision and Risk Analysis**,” Deliver lectures on probability theory, maximum likelihood estimation, and Bayesian statistics

Fall 2016, “**Frameworks for Inequality & Cultural Understanding**,” Design curriculum for and organize discussion classes

Guest lecturer, Department of Sociology and Criminal Justice, University of Delaware, Newark, Delaware, USA

Spring 2013, “**Sociology of Risk**,” Present lecture on social construction of risk

Undergraduate teaching assistant, Geography Department, Brandon University, Brandon, Manitoba, Canada

Fall 2011, “**Computer Cartography Laboratory**”

Fall 2010, “**Physical Geography Laboratory**”

Student tutor, Disability Services, Brandon University, Brandon, Manitoba, Canada

Fall 2010–Spring 2011, Assist students with learning disorders

CONFERENCE AND PRESENTATIONS

28. **Wang, Y. V.** Invited speaker. Presentation of the Science Seminar Series for the Environmental and Life Sciences M.S. program at Brandon University, “Disaster Science 101: The Discipline, the Formula, and the Opportunity,” Brandon, Manitoba, Canada (online), January 16, 2026
27. **Wang, Y. V.** Speaker. The 2025 Transportation Research Board (TRB) Conference on Innovative Science and Technologies to Improve Security and Safety in the Marine Transportation System, “Introducing Empirical Predictive Modeling for Vulnerability and Risk Assessment,” Washington, District of Columbia, USA, June 24–26, 2025
26. **Wang, Y. V.** Invited speaker. Presentation at the Center for Coastal Climate Resilience at the University of California Santa Cruz, “Introducing Empirical Predictive Modeling for Quantifying Social Vulnerability to Hazards,” Santa Cruz, California, USA (online), June 3, 2025
25. **Wang, Y. V.**, Kim, S. H., and Kafatos, M. C. Poster presenter. The 2025 Natural Hazards Engineering Research Infrastructure (NHERI) Computational Symposium, “Simulation for Verifying Empirical Predictive Models for Social Vulnerability,” Los Angeles, California, USA, February 5–7, 2025
24. **Wang, Y. V.** Speaker. The 26th Annual Federal Emergency Management Agency (FEMA) Higher Education Symposium, “Introducing Artificial Intelligence in Emergency Management Technology Courses,” Emmitsburg, Maryland, USA, June 3–5, 2024
23. Kim, S. H., **Wang, Y. V.**, Ryu, S., Lyu, G., Lee, G., Min, K.-H., and Kafatos, M. C. Leading researcher. The 2023 American Geophysical Union Fall Meeting, “Nowcasting Heavy Rainfall with Convolutional Long Short-Term Memory (ConvLSTM) Networks,” San Francisco, California, USA, December 11–15, 2023
22. Kafatos, M. C., **Wang, Y. V.**, Choi, W., Kim, S. H., and Reyes, K. Co-author. The 2023 American Geophysical Union Fall Meeting, “Monitoring and Modeling Compound Hazardous Conditions under Changing Climate,” San Francisco, California, USA, December 11–15, 2023
21. **Wang, Y. V.**, Kim, S. H., Nghiem, S. V., Choi, W., and Kafatos, M. C. Poster presenter. The 2023 International Geoscience and Remote Sensing Symposium,

- “Characterizing Ignition Risk of Wildfire due to Lightning over Western United States,” Pasadena, California, USA, July 16–21, 2023
20. Choi, W., Lee, H., Kim, S. H., **Wang, Y. V.**, Nghiem, S. V., and Kafatos, M. C. Co-author. The 2023 International Geoscience and Remote Sensing Symposium, “Retrieval of Aerosol Effective Height Using O₄ Absorption Property from Geostationary Environment Monitoring Spectrometer (GEMS) Measurements,” Pasadena, California, USA, July 16–21, 2023
19. **Wang, Y. V.** Speaker. The 48th Annual Natural Hazards Center Researchers Meeting, “Quantifying Social Vulnerability with Empirical Predictive Modeling,” Broomfield, Colorado, USA, July 12–13, 2023
18. Kim, S. H., **Wang, Y. V.**, Ryu, S., Lyu, G., Lee, C.-L., Lee, G., Min, K.-H., and Kafatos, M. C. Leading researcher. The 103rd American Meteorological Society Annual Meeting, “Assessment of Mesoscale Convective Systems Nowcasting Using Dual-Polarimetric Doppler Radar Data and Deep Learning Techniques During Warm Season,” Denver, Colorado, USA, January 8–12, 2023.
17. Kafatos, M. C., Jia, S., and **Wang, Y. V.** Co-author. The 2022 American Geophysical Union Fall Meeting, “Human Induced Factors and Cascading Effects for Recent Large Wildfires in California,” Chicago, Illinois, USA (hybrid), December 12–16, 2022
16. **Wang, Y. V.**, Kim, S., Lee, G., and Kafatos, M. C. Poster presenter. The 2022 American Geophysical Union Fall Meeting, “Pixelwise Modeling with Two-Dimensional Convolutional Long Short-Term Memory Networks for Nowcasting Heavy Rainfall,” Chicago, Illinois, USA (hybrid), December 12–16, 2022
15. **Wang, Y. V.** Speaker. The 47th Annual Natural Hazards Center Researchers Meeting, “Paradigmatic Proposal for Ontological Inquiries in Disaster Studies,” Boulder, Colorado, USA (virtual), July 13–14, 2022
14. **Wang, Y. V.** Speaker. Science Forum, Chapman University, “Empirical Modeling for Disaster Risk Quantification,” Orange, California, USA, May 11, 2022
13. **Wang, Y. V.** Poster presenter. The 2021 American Geophysical Union Fall Meeting, “Frequency Modeling for Bolide Hazard,” New Orleans, Louisiana, USA (hybrid), December 13–17, 2021
12. **Wang, Y. V.**, Sebastian, A., Kim, S. H., Piechota, T., and Kafatos, M. C. Speaker. The 2021 American Geophysical Union Fall Meeting, “Deep Learning for Spatial Interpolation of Rainfall Events,” New Orleans, Louisiana, USA (hybrid), December 13–17, 2021
11. Kim, S. H., **Wang, Y. V.**, Ryu, S., Lee, G., and Kafatos, M. Leading researcher. The 2021 American Geophysical Union Fall Meeting, “Assessment of Relative Importance of Radar Products for Nowcasting Heavy Rainfall Using Machine Learning Techniques,” New Orleans, Louisiana, USA (hybrid), December 13–17, 2021
10. **Wang, Y. V.** and Sebastian, A. Speaker. Geo-Extreme 2021, “Empirical Numerical Simulation of Precipitation Events for Pluvial Flood Management,” Savannah, Georgia, USA, November 7–10, 2021
9. **Wang, Y. V.** and Sebastian, A. Speaker. The 46th Annual Natural Hazards Center Researchers Meeting, “Leveraging Social Indicators to Model Community Vulnerability to Flooding for Risk Prediction,” Boulder, Colorado, USA (virtual), July 14–15, 2021

8. **Wang, Y. V.** and Sebastian, A. Speaker. The European Geosciences Union General Assembly 2021, “Typology of Hazard Event Severity Metrics for Multi-Hazard Research,” virtual, April 19–April 30, 2021. <https://doi.org/10.5194/egusphere-egu21-6468>
7. **Wang, Y. V.** and Sebastian, A. Speaker. The 2020 American Geophysical Union Fall Meeting, “Equivalent Magnitude Scale for Natural Hazards,” virtual, December 1–December 17, 2020
6. **Wang, Y. V.** Poster presenter. The 45th Annual Natural Hazards Workshop, “When the Sky Falls: An Overview of Extraterrestrial Natural Hazards,” Boulder, Colorado, USA (virtual), July 12–July 15, 2020
5. **Wang, Y. V.** Poster presenter. The 2nd Conference on Risk Analysis, Decision Analysis, and Security, “The Equivalent Hazard Intensity Scale for Vulnerability and Risk Analyses,” Buffalo, New York, USA, July 30–August 2, 2019
4. **Wang, Y. V.** Speaker. The 2015 International Research Committee on Disaster Researchers Meeting, “Using Bayesian Approach to Predict the Number of Occurrences of Natural Disasters in the United States in Year 2015,” Broomfield, Colorado, USA, July 23, 2015
3. Kumar, R., Gardoni, P., Murphy, C., and **Wang, Y. V.** Speaker. ICARUS IV: Causes of Vulnerability & Livelihoods of the Poor, “Which Consequences Matter in Risk Analysis for Natural Hazards,” University of Illinois at Urbana–Champaign, Urbana, Illinois, USA, May 9, 2015
2. **Wang, Y. V.** Speaker. The 2015 American Association of Geographers Annual Meeting, “The Disaster Marathon of 2014 Ludian Earthquake in Yunnan, China,” Chicago, Illinois, USA, April 24, 2015
1. **Wang, Y. V.** Speaker. 2011 Brandon University Senior Colloquium, “From Qushan, Beichuan to Weizhou, Wenchuan: Case Study of the Earthquake-Triggered Landslide Hazards after the 2008 Wenchuan Earthquake,” Brandon, Manitoba, Canada, April 2011

PROFESSIONAL SERVICE

19. **Faculty Athletic Liaison**, Track and Field and Cross-Country, Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA, March 2026–present
18. **Faculty Participant**, The Association of Continuity Professionals Greater Boston Fall Meeting, Massachusetts Emergency Management Agency Headquarters, Framingham, Massachusetts, USA, September 25, 2025
17. **Faculty Representative**, Massachusetts State College Association Standing Committee on Student Affairs, Massachusetts Maritime Academy Chapter, Buzzards Bay, Massachusetts, USA, September 2025–present
16. **Panelist**, US Department of State International Visitor Leadership Program, meeting at Massachusetts Maritime Academy on “Emergency Preparedness Planning for Senior Municipal Staff”, Buzzards Bay, Massachusetts, USA, August 20, 2025
15. **Instructor**, Sea, Science, and Leadership Program at Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA, July 22–23, 2025
14. **Panelist**, US Department of State International Visitor Leadership Program, meeting at Massachusetts Maritime Academy on “Disaster Preparedness and Emergency Management”, Buzzards Bay, Massachusetts, USA, May 22, 2025

13. **Supervisor**, Pickleball Club at Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA, December 2024–June 2025
12. **Supervisor**, students' participation in the Active Shooter Tactical Emergency Casualty Care (ASTECC) Exercise, Logan International Airport, East Boston, Massachusetts, USA, October 22–23, 2024
11. **Supervisor**, Unmanned Aerial Vehicle (UAV) Club at Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA, August 2024–present
10. **Coordinator**, Emergency Management Advisory Council at Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA, October 2023–present
9. **Cohost and Presenter**, US Department of State International Visitor Leadership Program, meeting at Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA, December 5, 2023
8. **Course Auditor**, Department of Emergency Management and Homeland Security, Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA, Fall 2023: 1) EM 2120: Emergency Management Planning; 2) SS 4132: Legal Issues in Emergency Management; 3) EM 2111: Infectious Agents; 4) EM 3121: Risk Management; 5) EM 2212: Emergency Management
7. **Consultant**, for résumé development for undergraduate students, The 2023 Emergency Management Career Day, Department of Emergency Management and Homeland Security, Massachusetts Maritime Academy, Buzzards Bay, Massachusetts, USA, October 18, 2023
6. **Session Chair**, The 48th Annual Natural Hazards Center Researchers Meeting, “Advancements in Modeling Physical Impacts of Disaster,” Broomfield, Colorado, USA, July 12–13, 2023
5. **Organizer**, The 33rd Annual Celebration of the Hanmi Family Counseling Center with the Institute for ECHO, Chapman University, Orange, California, USA, April 22, 2023
4. **Session Chair**, The 2022 American Geophysical Union Fall Meeting, “Human-Induced Factors and Effects on Natural Hazards,” Chicago, Illinois, USA (hybrid), December 12–16, 2022
3. **Participant**, The 2022 Faculty Research and Creative Scholars Expo, Chapman University, Orange, California, USA, September 22, 2022
2. **Participant**, The 2022 International Student Graduation Celebration, Chapman University, Orange, California, USA, May 15, 2022
1. **Participant**, The 2021 Faculty Research and Creative Scholars Expo, Chapman University, Orange, California, USA, October 28, 2021

PUBLICATIONS

Peer-Reviewed Journal Articles

12. **Wang, Y. V.**, Kim, S. H., Lyu, G., Lee, C. L., Ryu, S., Lee, G., Min, K.-H., and Kafatos, M. C. (2024). Nowcasting heavy rainfall with convolutional long short-term memory networks: A pixelwise modeling approach. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 17, 8424–8433.
<https://doi.org/10.1109/JSTARS.2024.3383397>
11. **Wang, Y. V.**, Kim, S. H., and Kafatos, M. C. (2023). Verifying empirical predictive modeling of societal vulnerability to hazardous events: A Monte Carlo experimental

- approach. *Reliability Engineering and System Safety*, 240, 109593.
<https://doi.org/10.1016/j.ress.2023.109593>
10. **Wang, Y. V.** and Sebastian, A. (2023). Murphy Scale: A locational equivalent intensity scale for hazard events. *Risk Analysis*, 43(3), 605–623.
<https://doi.org/10.1111/risa.13933>
 9. **Wang, Y. V.**, Kim, S. H., Lyu, G., Lee, C.-L., Lee, G., Min, K.-H., and Kafatos, M. C. (2023). Relative importance of radar variables for nowcasting heavy rainfall: A machine learning approach, *IEEE Transactions on Geoscience and Remote Sensing*, 61, 4100314. <https://doi.org/10.1109/TGRS.2022.3231125>
 8. **Wang, Y. V.** and Sebastian, A. (2022). Equivalent hazard magnitude scale. *Natural Hazards and Earth System Sciences*, 22(12), 4103–4118.
<https://doi.org/10.5194/nhess-22-4103-2022>
 7. Kim, J., Kim, S. H., Seo, H. W., **Wang, Y. V.**, and Lee, Y. G. (2022). Meteorological characteristics of fog events in Korean smart cities and machine learning based visibility estimation. *Atmospheric Research*, 275, 106239.
<https://doi.org/10.1016/j.atmosres.2022.106239>
 6. **Wang, Y. V.** and Sebastian, A. (2021). Community flood vulnerability and risk assessment: An empirical predictive modelling approach. *Journal of Flood Risk Management*, 14(3), e12739. <https://doi.org/10.1111/jfr3.12739>
 5. **Wang, Y. V.**, Gardoni, P., Murphy, C., and Guerrier, S. (2021). Empirical predictive modeling approach to quantifying social vulnerability to natural hazards. *Annals of the American Association of Geographers*, 111(5), 1559–1583.
<https://doi.org/10.1080/24694452.2020.1823807>
 4. **Wang, Y. V.** (2020). Empirical local hazard models for bolide explosions. *Natural Hazards Review*, 21(4), 04020037. [https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000405](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000405)
 3. **Wang, Y. V.**, Gardoni, P., Murphy, C., and Guerrier, S. (2020). Worldwide predictions of earthquake casualty rates with seismic intensity measure and socioeconomic data: A fragility-based formulation. *Natural Hazards Review*, 21(2), 04020001. [https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000356](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000356)
 2. **Wang, Y. V.**, Gardoni, P., Murphy, C., and Guerrier, S. (2019). Predicting fatality rates due to earthquakes accounting for community vulnerability. *Earthquake Spectra*, 35(2), 513–536. <https://doi.org/10.1193/022618EQS046M>
 1. **Wang, Y. V.** and Louis-Charles, H. M. (2017). Empirical examination of the theory of disaster marathon: A case study of the local television coverage following the 2014 Ludian, China earthquake. *The Communication Review*, 20(4), 246–276.
<https://doi.org/10.1080/10714421.2017.1377950>

Peer-Reviewed Conference Article

1. **Wang, Y. V.** and Sebastian, A. (2021). Empirical numerical simulation of precipitation events for pluvial flood management. In *Geo-Extreme 2021: Climatic Extremes and Earthquake Modeling*, ASCE, pp. 21–29.
<https://doi.org/10.1061/9780784483695.003>

Technical Report

1. **Wang, Y. V.**, Tabandeh, A., Gardoni, P., Hurt, T. M., Hartman, E. R., and Myers, N. R. (2016). *Assessing socioeconomic impacts of cascading infrastructure disruptions using the capability approach*. Champaign, IL, USA: US Army Engineer

Research and Development Center (ERDC).
<https://apps.dtic.mil/docs/citations/AD1016582>

Book

1. **Wang, Y. V.** (2011). *Phonetic Learning Should Be So (in Chinese)*. 207 pp. Shanghai Jiaotong University Press, Shanghai, ISBN:9787313071200

AWARDS AND HONORS

- 2015 Golden Key International Honor Society Membership in USA, University of Illinois at Urbana–Champaign
- 2012 Silver Medal in Applied Disaster and Emergency Studies, Brandon University
- 2012 Alumni Graduate Scholarship, Brandon University
- 2011 Golden Key International Honour Society Membership in Canada, Brandon University
- 2011 International Undergraduate Student Scholarship, Brandon University
- 2011 Disaster Recovery Information Exchange (DRIE) Scholarship, Brandon University
- 2010 International Undergraduate Student Scholarship, Brandon University
- 2010 Dan McNeill Memorial Scholarship, Brandon University
- 2010 Don and Glenora Slimmon Scholarship in Peace Studies, Brandon University
- 2010 Dr. Charles Whitfield Clark Memorial Scholarship in Physical Geography, Brandon University

FUNDED RESEARCH PROJECTS

8. **Postdoctoral associate** for Korea Meteorological Administration grant No. KMI2020-00910, “Classification and Predictors Analysis of Heavy Rain over the Korean Peninsula Using Dual-Polarimetric Radar and Machine Learning,” **US\$470,000**, through Chapman University. May 2020–December 2022
7. **Postdoctoral associate** for North Carolina General Assembly grant through Session Law 2019-224, “Strengthening Flood Resilience in Eastern North Carolina,” **US\$2,160,000**, through the North Carolina Policy Collaboratory at the University of North Carolina at Chapel Hill. April 2020–May 2021
6. **Postdoctoral associate** for NSF grant No. HRD-1436343, “Targeted Infusion Project: Prompting Effective Active Learning through Implementing Self-Regulated Learning Assessment in Diverse STEM Learning Settings,” **US\$399,996**, through Jackson State University. October 2018–March 2020
5. **Postdoctoral associate** for NSF grant No. HRD-1332591, “Broadening Participation Research Project: Effects of Scaffolding Cyber-Enabled Collaborative Learning in Authentic STEM Education Settings,” **US\$349,999**, through Jackson State University. October 2018–August 2019
4. **Postdoctoral associate** for NSF grant No. HRD-1036328, “Investigation of Effects of Scaffolding Creative Problem Solving through Question Prompts in Project-Based Service Learning,” **US\$499,677**, through Jackson State University. October 2018–August 2019
3. **Graduate research assistant** for US Army Corps of Engineers, Engineering Research and Development Center–Construction Engineering Research Laboratory (ERDC-CERL) award No. W9132T-15-2-003, “System Dynamic Modeling of the Ecosystem–Infrastructure Interface,” **US\$222,929**. January 2015–August 2016

2. **Graduate research assistant** for US Centers for Disease Control and Prevention project, “Harmonization, Continued Development, and Preliminary Validation of the Composite of Post-Event Well-Being (CoPE-WELL) and National Health Security Preparedness Index (NHSPI),” **US\$750,000**, through University of Delaware. January 2014–May 2014
1. **Undergraduate student internship** for Rural Development Institute, Brandon University, project, “Rural Vulnerabilities Related to Atypical Precipitation: Assiniboine Valley Case Study,” **Can\$3,000**. February 2011–May 2011

UNSUCCESSFUL GRANT PROPOSALS

1. **Principal investigator** for Federal Emergency Management Agency Higher Education Research grant, “Stochastic Machine Learning for Forecasting Detections of Lightning Wildfires in the Western United States,” **US\$10,000**, through Massachusetts Maritime Academy. September 2024–August 2025

EDITORSHIP

Editor, *Journal of Flood Risk Management* 2021–present

PEER REVIEWS

Journal Manuscript Reviews

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| 73. <i>Humanities and Social Sciences Communications</i> | July 2026 |
| 72. <i>Computers and Geosciences</i> | July 2026 |
| 71. <i>npj Natural Hazards</i> | June 2026 |
| 70. <i>Scientific Reports</i> | June 2026 |
| 69. <i>Agricultural and Forest Meteorology</i> | March 2026 |
| 68. <i>PLOS Medicine</i> | January 2026 |
| 67. <i>Geoenvironmental Disasters</i> | January 2026 |
| 66. <i>Nature Human Behaviour</i> | December 2025 |
| 65. <i>Earth Surface Processes and Landforms</i> | November 2025 |
| 64. <i>Agricultural and Forest Meteorology</i> | October 2025 |
| 63. <i>Remote Sensing Applications: Society and Environment</i> | October 2025 |
| 62. <i>Nature Human Behaviour</i> | September 2025 |
| 61. <i>International Journal of Disaster Risk Reduction</i> | September 2025 |
| 60. <i>Sustainable and Resilient Infrastructure</i> | August 2025 |
| 59. <i>Computers and Geosciences</i> | July 2025 |
| 58. <i>Atmospheric Research</i> | May 2025 |
| 57. <i>International Journal of Disaster Risk Reduction</i> | April 2025 |
| 56. <i>Nature Human Behaviour</i> | March 2025 |
| 55. <i>Reliability Engineering and System Safety</i> | March 2025 |
| 54. <i>Journal of Flood Risk Management</i> | March 2025 |
| 53. <i>Weather, Climate, and Society</i> | January 2025 |
| 52. <i>Discover Geoscience</i> | December 2024 |
| 51. <i>International Journal of Disaster Risk Reduction</i> | October 2024 |
| 50. <i>Pattern Recognition</i> | October 2024 |
| 49. <i>Discover Applied Sciences</i> | October 2024 |
| 48. <i>npj Natural Hazards</i> | August 2024 |
| 47. <i>Weather, Climate, and Society</i> | August 2024 |

46.	Mathematical Biosciences and Engineering	August 2024
45.	<i>Pattern Recognition</i>	July 2024
44.	<i>Reliability Engineering and System Safety</i>	June 2024
43.	<i>Sustainable and Resilient Infrastructure</i>	June 2024
42.	<i>International Journal of River Basin Management</i>	June 2024
41.	Pattern Recognition	May 2024
40.	<i>Reliability Engineering and System Safety</i>	April 2024
39.	Scientific Reports	March 2024
38.	<i>International Journal of Disaster Risk Reduction</i>	February 2024
37.	<i>Reliability Engineering and System Safety</i>	February 2024
36.	International Journal of River Basin Management	February 2024
35.	Science Advances	December 2023
34.	<i>Reliability Engineering and System Safety</i>	December 2023
33.	<i>International Journal of Disaster Risk Reduction</i>	December 2023
32.	<i>International Journal of Disaster Risk Reduction</i>	September 2023
31.	<i>Journal of Flood Risk Management</i>	August 2023
30.	<i>Natural Hazards and Earth System Sciences</i>	February 2023
29.	<i>Annals of the American Association of Geographers</i>	February 2023
28.	Natural Hazards	February 2023
27.	Quality and Quantity	January 2023
26.	<i>Sustainable and Resilient Infrastructure</i>	January 2023
25.	<i>Reliability Engineering and System Safety</i>	January 2023
24.	<i>Journal of Flood Risk Management</i>	December 2022
23.	<i>Journal of Flood Risk Management</i>	October 2022
22.	Annals of the American Association of Geographers	September 2022
21.	Natural Hazards and Earth System Sciences	August 2022
20.	<i>Reliability Engineering and System Safety</i>	May 2022
19.	<i>Journal of Flood Risk Management</i>	May 2022
18.	<i>Journal of Flood Risk Management</i>	April 2022
17.	<i>Reliability Engineering and System Safety</i>	April 2022
16.	<i>Sustainable and Resilient Infrastructure</i>	March 2022
15.	<i>Reliability Engineering and System Safety</i>	January 2022
14.	<i>Journal of Flood Risk Management</i>	January 2022
13.	<i>Sustainable and Resilient Infrastructure</i>	January 2022
12.	<i>Sustainable and Resilient Infrastructure</i>	November 2021
11.	<i>Sustainable and Resilient Infrastructure</i>	September 2021
10.	<i>Reliability Engineering and System Safety</i>	August 2021
9.	Journal of Flood Risk Management	August 2021
8.	<i>Reliability Engineering and System Safety</i>	October 2020
7.	<i>Asian Journal of Communication</i>	July 2020
6.	<i>Reliability Engineering and System Safety</i>	May 2020
5.	Asian Journal of Communication	April 2020
4.	Reliability Engineering and System Safety	March 2020
3.	<i>Sustainable and Resilient Infrastructure</i>	February 2020
2.	Sustainable and Resilient Infrastructure	December 2019
1.	International Journal of Disaster Risk Reduction	March 2019

Book Proposal Review

1. *MIT Press*

April 2025

MEMBERSHIP

Road Runners Club of America	2025–present
American Geophysical Union	2020–2025
American Society of Civil Engineers	2019–2025
Earthquake Engineering Research Institute	2018–2024
European Geosciences Union	2021–2025
Institute of Electrical and Electronics Engineers	2023–2024

SKILLS

ArcGIS, MATLAB, Office, Python, QGIS, qualitative content analysis, R

CERTIFICATES

Quantum Computing Foundations	February 2026
Road Runners Club of America Distance Running Coach	August 2025–present
Adult and Pediatric First Aid/CPR/AED	July 2025–present

RELIGIOUS SERVICE

8. **Speaker**, Sermon, “Science: Enabled by God,” Salvation Army Plymouth Corps Community Center, Plymouth, Massachusetts, USA, June 14, 2026
7. **Speaker**, Sermon, “A Tale of Repentance,” Salvation Army Plymouth Corps Community Center, Plymouth, Massachusetts, USA, February 8, 2026
6. **Speaker**, Sermon, “When the Earth Shakes,” Salvation Army Plymouth Corps Community Center, Plymouth, Massachusetts, USA, September 14, 2025
5. **Speaker**, Sermon, “Standing Strong,” Salvation Army Plymouth Corps Community Center, Plymouth, Massachusetts, USA, August 3, 2025
4. **Speaker**, Sermon, “Clothed in Humility,” Salvation Army Plymouth Corps Community Center, Plymouth, Massachusetts, USA, June 1, 2025
3. **Speaker**, Sermon, “Days of God Part II,” Salvation Army Plymouth Corps Community Center, Plymouth, Massachusetts, USA, March 9, 2025
2. **Speaker**, Sermon, “Days of God Part I,” Salvation Army Plymouth Corps Community Center, Plymouth, Massachusetts, USA, March 2, 2025
1. **Leader**, Call to Worship, Salvation Army Plymouth Corps Community Center, Plymouth, Massachusetts, USA, June 2024–present