## **CURRICULUM VITAE**

## TANVEER ISLAM, Ph.D., CFM

Head and Professor Department of Emergency Management & Public Administration Jacksonville State University

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### Education

# Post-DocDepartment of Marine Science, Texas A&M University Marine branch at Galveston2007-08Post-Doctoral Fellowship from Houston Advanced Research Center

**Ph.D.**Land Use Planning, Texas Tech University2006Major: Land Use Planning, Management and Design (with specialization in<br/>natural hazards management)

Dissertation: Integrated Approach to Cyclone Wind Analysis and Disaster Planning for the Bangladesh Coast.

M.S.Geography and Geospatial Sciences, University of Texas, Dallas(transferred toMajor: Geographic Information Systems (GIS)Texas Tech)Completed 9.0 credit hours with 3 GIS courses in fall 2002.

B.S.Bangladesh University of Engineering & Technology (BUET)2002Major: Urban and Regional Planning<br/>Thesis: Analysis of regional distribution of physical facilities using GIS.

## **Professional Certification**

**CFM** Certified Floodplain Manager, Association of State Floodplain Managers 2005-present Certification # 0728-05N. *Title awarded for passing the National CFM Exam and for meeting the criteria in the area of experiences, education and training on floodplain management and hazard mitigation.* 

# Academic and Professional Positions Held

<b>Department Head and Professor</b> Department of Emergency Management & Public Administration, Jacks	October 2019– present sonville State University
Heading up the Department of Emergency Management and Public Administration, its faculty, staff, and accredited educational programs (Bachelor's, Master's, and Doctoral). Provide instruction at the Doctoral, Masters, and Undergraduate levels. Research interests include disasters and social vulnerability, community resilience, local government planning, weather and environmental hazards, and GIS applications. Promoted to Professor from Fall 2021.	
Director of Doctoral ProgramJanuaryDepartment of Emergency Management, Jacksonville State University	2017– September 2019
Heading up the Doctoral program in emergency management.	
Visiting Professor Maastricht School of Management, the Netherlands	2019-2022
Taught a graduate level course in fall 2019.	
Instructor/Consultant Center for Domestic Preparedness (CDP), Department of Homeland Sec Management Agency/Leidos	November 2017–2022 curity/Federal Emergency
Center for Domestic Preparedness (CDP), Department of Homeland Sec	
Center for Domestic Preparedness (CDP), Department of Homeland Sec Management Agency/Leidos	
Center for Domestic Preparedness (CDP), Department of Homeland Sec Management Agency/Leidos DHS Certified Instructor for the Center for Domestic Preparedness Assistant Professor (Tenure-track)	curity/Federal Emergency

#### **NOAA EPP Research Faculty** January 2009 – July 2011 National Oceanic and Atmospheric Administration (NOAA) - Environmental Cooperative Science Center, headquartered at Florida A&M University.

Post-Doctoral Research FellowJanuary 2007 – December 2008The Center for Texas Beaches & Shores, Texas A&M University Marine branch at Galveston.

Graduate Research AssistantJanuary 2003 – December 2006Atmospheric Science Group, Wind Science and Engineering Research Center, Texas Tech University.

Assistant Director of Urban Planning and ManagementApril 2002 – August 2002Local Government Engineering Department (LGED), Government of Bangladesh.

## Publications

#### A. Books:

 Grover H. Islam T. & Slick J. (2022). Case studies in disaster mitigation and prevention disaster and emergency management: case studies in adaptation and innovation series. Elsevier Science & Technology. Elsevier (Butterworth-Heinemann), Waltham, Massachusetts. ISBN#978-0128095287
 <u>https://www.elsevier.com/books/case-studies-in-disaster-mitigation-and-prevention/grover/978-0-12-809528-7</u>

• Islam T. and Ryan J. (2015) Hazard Mitigation in Emergency Management, Elsevier (Butterworth-Heinemann), Waltham, Massachusetts. ISBN#978-0125201347 http://store.elsevier.com/Hazard-Mitigation-in-Emergency-Management/Tanveer-Islam/isbn-9780124201347/

• Islam T. (2008) Cyclone Wind Analysis and Disaster Planning, ISBN#978-3836461436 Saarbrücken, Germany. <u>http://www.amazon.com/Cyclone-Wind-Analysis-Disaster-Planning/dp/3836461439</u>

#### **B. Peer-Reviewed Journal articles and Conference Proceedings:**

 Wang, C., Rider, E., Manning, S., Fast, J., & Islam, T. (2022). Qualitative Analysis of the Lived Experience of Tornado Survivors and Factors Affecting Community Resilience: A Case Study of an EF-3 Tornado in Jacksonville, Alabama, Weather, Climate, and Society <u>https://journals.ametsoc.org/view/journals/wcas/aop/WCAS-D-22-0067.1/WCAS-D-22-0067.1.xml</u>  R. Hasan, R. Hasan and T. Islam (2022) "Smart City Technology for Disaster Management: Demonstrating the Use of Bluetooth Low Energy (BLE) Beacons for Emergency Alert Dissemination," 2022 IEEE 19th Annual Consumer Communications & Networking Conference (CCNC), Las Vegas, NV, USA, 2022, pp. 931-932, <u>https://ieeexplore.ieee.org/abstract/document/9700562</u>

R. Hasan, R. Hasan and T. Islam (2021) "InSight: A Bluetooth Beacon-based Ad-hoc Emergency Alert System for Smart Cities," 2021 IEEE 18th Annual Consumer Communications & Networking Conference (CCNC), Las Vegas, NV, USA, 2021, pp. 1-6. https://ieeexplore.ieee.org/abstract/document/9369621

• Flynn, W. & Islam, T. (2019) Spatial and temporal analysis of the 27 April 2011 tornado outbreak in Central Alabama, *GeoJournal*, <u>https://doi.org/10.1007/s10708-018-9874-3</u>

• Kearns, C. & Islam, T. (2018) Analysis of 9-1-1 Call Data from an Emergency Management Perspective: A Case Study of the City of Lethbridge, Journal of Emergency Management Vol. 16, No. 5: 337-347.

• Siskey A. and Islam T. (2016) Social Media Best Practices in Emergency Management, *Journal of Emergency Management*, Vol. 14, No. 2: 113-125.

• Mann S. and Islam T. (2015) The Roles and Involvement of Local Government Human Resource Professionals in Coastal Cities Emergency Planning. *Journal of Homeland Security and Emergency Management*, Vol. 12 (1): 145-168. DOI: <u>10.1515/jhsem-2013-0087</u>

• Islam, T. (2013) Tsunami: From Fundamentals to Damage Mitigation (Book Review), *Journal of Homeland Security and Emergency Management*, 10 (2)

• Islam T., Merrell W., and Seitz W. (2010) Galveston Futures: Developing a Disaster Resilient Community. *J. Geog. and Regional Planning*, Vol. 3(1), pp. 001-007.

• Islam T., Marshall A., Robinson L, and Johnson E (2010) Socio-economic Vulnerability of African Americans in the Gulf Coast counties, *Proceedings of The Coastal Society's 22nd International Conference*, Wilmington, North Carolina. http://aquaticcommons.org/3917/

• Islam T., Merrell W., Seitz W. and Harriss R. (2009) Origin, Distribution and Timing of Texas Hurricanes: 1851-2006. *Natural Hazards Review*, Vol. 10 (4): 136-144, ASCE. http://dx.doi.org/10.1061/(ASCE)1527-6988(2009)10:4(136)

• Islam T. and Peterson R. (2009) Climatology of Landfalling Tropical Cyclones in Bangladesh 1877-2003. *Natural Hazards*. 48: 115-135, Springer Publications, <u>http://link.springer.com/article/10.1007%2Fs11069-008-9252-4</u> • Islam T. (2009) Climatology and Scenarios of Landfalling Texas Hurricanes: 1851-2006. *Proceedings of the 5th NOAA EPP Science and Education Forum*, Washington DC http://ams.confex.com/ams/5EDUSCIFORUM/techprogram/paper\_161313.htm

Islam T. and Marshall A. (2009) Socio-economic Vulnerability of African Americans to Hurricanes in the Gulf States. *Proceedings of the 5th NOAA EPP Science and Education Forum*, Washington DC. http://ams.confex.com/ams/5EDUSCIFORUM/techprogram/paper\_162616.htm

• Islam T. and Peterson R. (2008) Tropical Cyclone Wind Characteristics for the Bangladesh Coast Using Monte Carlo simulation. *Journal of Applied Sciences*. 8 (7): 1249-1255 pp. http://adsabs.harvard.edu/abs/2008JApSc...8.1249M

• Islam T. (2007) Integrated Approach to Cyclone Wind Analysis and Disaster Planning for the Bangladesh Coast (Abstract). *Journal of Planning Literature*, 11 2007; vol. 22: pp. 163.

• Islam T. and Peterson R. (2006) Tropical Cyclone Wind Characteristics for the Bangladesh Coast Using Monte Carlo simulation. *Proceedings of the 27th American Meteorological Society* (*AMS*) Conference on Hurricanes and Tropical Meteorology, Monterey, California. <u>http://ams.confex.com/ams/pdfpapers/107887.pdf</u>

• Islam T. and Peterson R. (2006) Cyclone Risk and Vulnerability in the Coastal Areas of Bangladesh. *Proceedings of the 16th World Conference on Disaster Management*, Toronto, Canada.

• Islam T. and Peterson R. (2004) A Climatological Study on the Landfalling Tropical Cyclones of Bangladesh. *Proceedings of the 26th AMS Conference on Hurricanes and Tropical Meteorology*, Miami, Florida. <u>http://ams.confex.com/ams/pdfpapers/75681.pdf</u>

#### C. Technical Report:

• Islam T., Marshall A., and Johnson E (2010) Socio-economic Vulnerability of African Americans to Hurricanes in the Gulf States Using GIS. *Southern Regional Asset Building Coalition*: <u>http://srabcoalition.org/resources//srabc-reports/</u>

#### **D.** Other articles:

• Islam, T. and Ryan, J. (2018) *Use of GIS in Flood Management and Decision-making Processes*, Bulletin of International Association of Emergency Managers, January 2018

• Richardson, C., Islam, T. and Richards, R. (2014) *Shelter Etowah: Providing Safe Refuge in Alabama*, Bulletin of International Association of Emergency Managers, February 2014

• Islam T. (2007) Tornadoes: can we reduce vulnerabilities? The Daily Star, Vol. 5 Num 1052, May 18, 2007. <u>http://www.thedailystar.net/2007/05/18/d705181803127.htm</u>

## Presentations

• Brindle, T, Huang, S, Islam T. and Kushma J (2020) A Protective Action Decision Model for Inter-organizational Supply Chain Resilience, Poster Presentation, Natural Hazards Workshop, Boulder, Colorado

• Islam T. and Flynn W (2019) Spatial and Temporal Analysis of the April 27, 2011 Tornado Outbreak in Central Alabama, Poster Presentation, Natural Hazards Workshop, Boulder, Colorado

• Islam T, Burton, M, Morrow E & Kushma J (2019) Severe Weather Preparedness in Calhoun County, JSU Strong: One Year Later Commemoration Lunch & Learn event

• Islam T. (2019) Teaching in online environment: Best practices & challenges. Invited Talk at JSU Faculty Commons, April 1, 2019

• Islam T. and Siskey A. (2015) Social Media Best Practices in Emergency Management, Annual Conference of the American Society for Public Administration, Chicago, Illinois March 6-10, 2015.

• Islam T. (2015) U.S. Department of Homeland Security Center of Excellence Grant Review Panel, University of Washington, March 18, 2015.

• Islam T. and Kearns C. (2014) Public Safety Communications at the Local Level: GIS Analysis of 9-1-1 Call Data to Recommend Better Delivery of Emergency Services, Annual Conference of the American Society for Public Administration, Washington DC, March 14-17, 2014

 Smith J. and Islam T. (2014) Geospatial Analysis of Crime and Calls for Service in Lawrenceville, Georgia: A Small-Scale Methodology to Examine Potential Correlates, Southern Criminal Justice Association (SCJA) Conference, Clearwater Beach, FL, September 17-20, 2014. http://www.scja.net/2014SCJAprogram.pdf

• Islam T. and Kearns C. (2013) ESRI International User Conference, "Analyzing 9-1-1 Call Data from an Emergency Management Perspective," San Diego, CA. July 8-10, 2013.

• Islam T. (2013) Socio-economic Vulnerability of African Americans to Hurricanes in the Gulf Coast of the United States, NOAA Science Seminar, Silver Spring, MD January 15, 2013. <u>http://www.nodc.noaa.gov/seminars/2013/01-jan.html#OneNOAAScienceSeminars\_15Jan2013\_NOS</u>

• Islam T. (2013) Socio-economic Vulnerability of African Americans to Hurricanes in the Gulf Coast Counties, 13<sup>th</sup> National Conference on Science and Environment, Washington,

D.C., January 15-17, 2013

• Islam T. (2012) Cyclone Wind Analysis for Coastal Areas and Disaster Management in Bangladesh, Institute of Planners, Dhaka, December 22, 2012

• Islam T. (2012) Cyclone Wind Analysis for Coastal Areas and Disaster Management in Bangladesh, University of Dhaka, December 27, 2012

• Mann S and Islam T (2012) Roles and Involvement of Local Government Human Resource Professionals in Coastal Cities Emergency Planning, *SECOPA 2012*, October 3-6, 2012, Coral Springs, Florida

• Islam T and Mann S (2012) Roles and Involvement of Local Government Human Resource Professionals in Coastal Cities Emergency Planning, *The Coastal Society's 23rd International Conference*, June 3-6, 2012, Miami, Florida. http://nsgl.gso.uri.edu/coastalsociety/TCS23/papers/59%20Islam.pdf

• Islam T. (2010) Socio-economic Vulnerability of African Americans to Hurricanes, Hurricane Preparedness Workshop, Pensacola, Florida, November 6, 2010.

Islam T. and Marshall A. (2010) Addressing Socio-economic Vulnerability, *American Planning Association's (APA) National Planning Conference,* New Orleans, LA. 2010.
Islam T. (2009) Galveston Futures: Developing a Disaster Resilient Community, Invited Lecture at Stony Brook University, November 17, 2009.

• Islam T. (2009) Socio-economic Vulnerability of African Americans to Hurricanes in the Gulf States. ESI Seminar Series, Florida A&M University, Nov 4, 2009.

• Islam T. (2009) Origin, Distribution, and Timing of Texas Hurricanes and ECSC Integrated Assessment Activities, Hollings Marine Lab, Charleston, SC, August 20, 2009.

• Islam T. (2009) Climatology and Scenarios of Texas Hurricanes from Planning Perspective, NOAA Science Discussion Seminar, National Oceanic and Atmospheric Administration, Silver

Spring, MD, July 22, 2009. <u>http://www.nodc.noaa.gov/General/NODC-</u> About/Outreach/NODC-seminars09.html#OneNOAASeminar\_22July2009

• Islam T. (2009) Integrated Environmental Assessment, Invited Lecture, 2009 NOAA ESI Summer Camp, Humphries Science Research Center, Florida A&M University, June 17, 2009.

• Islam T. (2009) Strategies to Reduce Greenhouse Gas Emissions, 2009 Annual NOAA Environmental Awareness Poster Competition, NIMS Middle School, Tallahassee, FL, March 26, 2009.

• Islam T. (2009) Assessment of Historic Land Use and Land Cover Patterns in Mission-Aransas Watershed, Florida A&M University, March 1, 2009. • Islam T. (2008) Galveston Futures: Developing a Disaster Resilient Community, Invited Lecture at Florida A&M University, May 30, 2008.

• Islam T. (2008) Texas Hurricanes and Tornadoes, Faculty and Staff Symposium, Texas A&M University at Galveston, Moody Gardens Convention Center, January 4, 2008.

• Islam T. (2007) Galveston Futures: Developing a Disaster Resilient Community. The American Shore and Beach Preservation Association, October 22-24, 2007, Galveston, Texas. <u>http://www.asbpa.org/pdfs/07confProgram.pdf</u>

• Islam T., Merrell W and Seitz W. (2007). Origin, Distribution and Timing of Hurricanes Hitting Texas. Severe Storm Preparation, Education & Evacuation from Disasters (SSPEED) Conference, May 9-10, Rice University, Houston, Texas

• Seitz W., Merrell W., Islam T. and Brody S. (2007). Tools for Coastal Community Planning. Severe Storm Preparation, Education & Evacuation from Disasters (SSPEED) Conference, May 9-10, Rice University, Houston, Texas

• Islam T., Merrell W., Seitz W., Harriss R. and Brody S. (2007). Galveston Futures: Developing a Disaster Resilient Community. Texas Hurricane Conference, May 8-10, 2007, Galveston, Texas

## Honors & Awards

• IAEM-USA Advisor of the Year Award, International Association of Emergency Managers, 2017

http://www.jsu.edu/news/articles/2017/10/emergency-management-professor-wins-nationaladvising-award-.html

• Faculty Research Award, Jacksonville State University, 2016 & 2014

 IAEM-USA Technology & Innovation Award, International Association of Emergency Managers, 2014

http://www.jsu.edu/news/articles/2014/07/shelter-etowah-mobile-app-wins-award-from-international-association-of-emergency-managers.html

- NOAA Education Partnership Program (EPP) Fellowship, 2009-2011
- HARC Postdoctoral Fellowship, 2007-2008
- George T.C. Peng Urban Studies Scholarship, Texas Tech University, 2004-2005

- Winner, Graduate School Research Poster Competition, Texas Tech University, 2005
- Runners-Up, Graduate School Research Poster Competition, Texas Tech University, 2006

## Grants

*Principal Investigator*, "Developing Network Incident Response Framework for Law Enforcement Agencies" U.S. Department of Homeland Security, \$281,413.41 (2022-).

*Co-Principal Investigator*, "Assessment of Diversity, Equity, and Inclusion Efforts in State and Local Emergency Management Agencies" FEMA- Higher Education Program, \$9,524 (2022-2023).

*Principal Investigator,* "BRIDGE: Building Resilience: Introducing Disaster Games in Education" National Science Foundation, \$508,463 (2023-2025). Under review.

*Co-PI*, "Infusing Cybersecurity in Middle and High Schools Serving Rural and Underserved Communities," NSA-NSF, \$99,000.00, 2017-2018.

*Principal Investigator*, "Comprehensive Natural Hazards Literacy Program to Foster Community Resilience in the State of Alabama" NOAA Environmental Literacy Grant, \$499,909 (2016-2019). Under review.

*Principal Investigator*, "Analyzing Damage Patterns of the April, 2011 tornadoes in Alabama Using GIS" Faculty Research Grant, Jacksonville State University, \$2,600.00 (2014-2015)

*Co-PI*, "DHS S&T Critical Infrastructure Resilience Center of Excellence," U.S. Department of Homeland Security, \$16M with University of Washington (JSU portion \$407,196.20). One of the three finalists.

*Principal Investigator,* "Integrating Understanding of Critical Infrastructure Resilience in Infrastructure Management and Urban Planning Curriculum through creation of an Advanced Community of Practice," U.S. Department of Homeland Security, \$187,525 (not funded)

*Principal Investigator*, "Integrating Coastal Resilience with Emergency Management and Homeland Security Curriculum," U.S. Department of Homeland Security, \$389,381 (not funded)

*Principal Investigator*, "Weather and Climate Literacy: Professional Development for K-12 Educators on Severe Weather and Climate Change to Increase Weather-Readiness and Disaster Resilience," National Oceanic and Atmospheric Administration (NOAA), Federal, \$608,595.00. *Principal Investigator*, "Analysis of 9-1-1 call data to develop effective emergency management strategies," Faculty Research Grant, Jacksonville State University, \$2,600.00 (2012-2013)

Travel Grant for "Social Media Best Practices in Emergency Management," Sponsored by Academic Affairs, Jacksonville State University, \$750.00. (December 2014-March 2015)

Travel Grant for "Public Safety Communications at the Local Level: GIS Analysis of 9-1-1 Call Data to Recommend Better Delivery of Emergency Services," Sponsored by Academic Affairs, Jacksonville State University, \$500.00. (December 2013-March 2014)

*Principal Investigator*, "Developing a Framework to Engage Minority Population in Building Coastal Community Resilience" January 2012-December 2014, U.S. Environmental Protection Agency, Amount requested \$291,265 (not funded)

Travel Grant for "The Roles and Involvement of Local Government Human Resource Professionals in Coastal Cities Emergency Planning," Sponsored by Academic Affairs, Jacksonville State University, \$750.00. (February 2012 - May 2012).

*Personnel,* "Effective Communication for People with Disabilities: Before, During, and After Emergencies," National Council on Disabilities, Federal, \$500,000.00. (March 2012).

*Principal Investigator*, "Socio-economic Vulnerability of African Americans in the Gulf Coast Region- a Case Study of Escambia County, Florida", 2011-2012. Funded by the Ford Foundation through the Southern Regional Asset Building Coalition, Amount requested \$6000.00

*Principal Investigator*, "Minority Students and Community Outreach on Hurricane Preparedness and Adaptation", April-December, 2010-2011. Gulf of Mexico Alliance (GOMA) Environmental Education Network, Amount received \$9350.00

*Principal Investigator*, "Assessing Socio-Economic Vulnerability of African Americans to Hurricanes in the Gulf States using GIS", 2009-2010. Funded by the Ford Foundation through Southern Regional Asset Building Coalition, Amount received \$5000.00

*Co-PI*, "An integrated assessment of the source(s), transport and fate of contaminants to the Apalachicola Bay National Estuarine Research Reserve", 2009-2013. NERRS Science Collaborative. Amount requested \$ 900,000 (not funded)

*Personnel*, "Assessment of Historic Land Use/Land Cover Patterns in Mission-Aransas Watershed", 2009-2011. Funded by NOAA ECSC, Amount received \$ 54,000.

*Personnel,* "Southeast RISA: Climate Change and its impacts", NOAA-RISA program, 2010-2014. Amount requested \$ 3,500,000

*Co-PI*, "Texas Coastal Storms & Erosion Data Network", Texas General Land Office Coastal Management Program (CMP), 2008. Amount requested \$ 77,000.00 (not funded)

Texas Public Education Grant, State of Texas, 2006. Amount received \$2500.00

College of Architecture Travel Grant, Texas Tech University, 2006. Amount received \$500.00

Department of Geosciences Travel Grant, Texas Tech University, 2004. Amount received \$1000.00

## Academic and Professional Services

Faculty Advisor, JSU-IAEM Student Chapter, 2011-2019

Faculty Senator, Jacksonville State University Faculty Senate, 2011-2014

JSU Gamecock Orientation Advisor, 2012

Judge, College of Arts and Science Symposium, JSU, 2012

Reviewer, Grant Proposal, National Science Foundation. (2009 - Present).

Reviewer, Natural Hazards. (2011 - Present)

Reviewer, Natural Hazards Review (2013 - Present).

Reviewer, International Mass Emergencies and Disasters (2013 - Present).

Reviewer, Geographical Review (2012 - Present).

Reviewer, Journal of Applied Sciences. (2009 - 2010).

Member, Welfare Committee, JSU Faculty Senate, 2011-2013

Member, Doctoral Program Committee, 2011-present

Member, Faculty Search Committee, 2011-2013

Member, Organizing Committee, NOAA Environmental Poster Competition, 2009-2011

Member, Lab Committee, NOAA ECSC Summer Camp Advisory Committee, 2009-2011

Judge, Galveston County Science and Engineering Fair, 2007 and 2008

Member, Disaster Action Team (DAT), American Red Cross, Lubbock. 2004-2006

## **Professional Affiliations (past and present)**

- International Association of Emergency Managers
- American Society for Public Administration
- Association of State Floodplain Managers
- Phi Kappa Phi Honor Society
- American Planning Association
- The Coastal Society
- American Meteorological Society
- American Association of Wind Engineering