

FATEMA TUZ JOHRA NOURIN

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EDUCATION

MA in Community and Regional Planning with a minor in Statistics (Ongoing)	Fall 2022
Iowa State University, Ames, Iowa. CGPA: 3.74 (Continuing)	
MA in Geography	August 2019
University of Wyoming. CGPA: 3.87	
Bachelor of Urban and Regional Planning	September 2015
Bangladesh University of Engineering and Technology, (BUET). CGPA: 3.47	

TECHNICAL SKILLS

Programming Skills	Python
GIS Software	QGIS, ArcGIS Pro, ArcGIS Desktop, ArcGIS Online, Google Earth Engine, ILWIS, GDAL
Data Analysis and Management Tools	Python library (NumPy, ArcPy, Panda, Matplotlib, geemap), R, Microsoft SQL Server, SPSS, PostgreSQL
Others	AutoCAD, Microsoft project

MAJOR COURSES TAKEN AT GRADUATE LEVEL

GIS Applications	Smart Cities, Internet GIS, Fire Ecology
GIS Programming	GIS Programming and Automation, Spatial Modeling, Introduction to Python Spatial Analysis
Remote sensing	Fundamentals of Remote Sensing
Data Analysis & management	Statistical Methods for Research, Regression Analysis, Environmental Data Management, Statistical Theory for Research Workers (Fall2022)
Others	Traffic Engineering

EXPERIENCE

Graduate Teaching Assistant at Iowa State University	Fall 2020-Present
Department of Community and Regional Planning, College of Design Course: CRP 251- Fundamentals of GIS Syllabus included: ArcGIS Online and applications such as- ArcGIS Insights, Story maps, Survey123, Field Maps.	
GIS Technician at GIS Facility, Iowa State University	Summer 2021 - Present
<ul style="list-style-type: none">▪ Crop boundary delineation for the Agricultural Conservation Planning Framework (ACPF) project (Summer 2021, Summer 2022).▪ Preparation of a historical topographic map service of Iowa from scanned maps and generation of the pipeline of the work that has been used in other projects (Fall 2021), Published in- https://ortho.gis.iastate.edu/index.html▪ Georeferencing of historic DOT maps of Iowa and ceartion of a time enabled map service (Spring 2022).▪ Lidar Data Classification for Clarke, Decatur and Madison Counties (Spring 2022).	
Team Leader at Play Ames: Imagine your City Festival	Fall 2021
<ul style="list-style-type: none">▪ Led the Digital mapping of benches, Paper mapping of unsafe places, and exploring virtual reality.▪ Created a website for the project: https://www.communityengagementill.net/	
GIS Intern, unevictIA	Summer 2021
<ul style="list-style-type: none">▪ Developed first ever eviction record map of 22 most populated Iowa counties and Interactive Year-wise eviction Chart using Shiny R (https://www.unevictia.com/map-data).	

Graduate Teaching Assistant at University of Wyoming

August 2017- May 2019

Department of Geography

Course: GEOG 4200- Introduction to GIS (Fall 2017, Fall 2018) GEOG 4210/5210- Advanced GIS (Spring 2018, Spring 2019)

Syllabus included: Projection and transformation, topology, georeferencing, Raster analysis, GIS modeling, and some GIS automation using ArcGIS model builder. Utilized the extensions- Spatial analyst, 3D analyst, network analyst.

Research Associate at Institute of Water and Flood Management

May 2016 - June 2017

*Project: REACH- Improving Water Security for the Poor, Globally Led by University of Oxford, UK.*Primary Duties: GIS data collection and map preparation, Land Use Land Cover Change Detection of Dhaka City from 1995, 2000, and 2005 images using **QGIS**.Briefly worked as an **Intern at the Department of Environment (DoE), Dhaka** (January 2015 - February 2015).

SELECTED PUBLICATIONS & RESEARCH

Nourin, F. T. J., Tobin, T., Pechman, R. J. 2021. Game-Based Community Engagement with Spot-the-Differences Game and Survey123- Paper accepted at ESRI User Conference, San Diego, CA. [**Conference Paper**]**Nourin, F.T.J.**, Xu, C. 2019. An Exploratory Analysis of Social Media Data Usage in Yellowstone National Park- Paper presented at the national AAG 2019 Annual Meeting in Washington, DC. [**Conference Paper**]Betcher, G., Poplin A., Schroeder, S., **Nourin, F.T.J.**, Jacobson, N., Sairamesh, V.P. 2022. Play Ames: Imagine Your City-A City-University Partnership to Increase Engagement with Underrepresented. *International Town and Gown Association (ITGA) Annual Conference*, Clemson, South Carolina. [**Conference Paper**]Poplin A., Schroeder, S., **Nourin, F.T.J.** 2023. Play Ames: Imagine your City, 1st community engagement festival in Ames, Iowa.Mittal, J. LaFrombois, M.E.H. (eds). *Partners in Planning: University-Community Partnerships in Planning Education*. Auburn University, AL, United States. . [**Book Chapter**]Mahmood, S., **Nourin, F. T. J.**, Siddika, A., & Khan, T. F. (2017). Encroachment of the Buriganga River in Bangladesh. *Journal of Minerals and Materials Characterization and Engineering*, 5(5), 266-273. [**Journal Article**]**Nourin, F.T.J.**, Mahmood S., Chayon M.S.A., Siddika, A., Khan M.S.A. 2017. Assessment of Different Dimensions of Irrigation Water Security in A Coastal Polder of Bangladesh –6th International Conference on Water & Flood Management (ICWFM-2017). [**Conference Paper**]Kosacz, T., Gula, M., Poplin, A., Tobin, T., **Nourin, F.T.J.** 2021. Mapping Unsafe Places and Emotions: Study of Ames, Iowa- Third International Symposium on Platial Information Science, Hosted by ITC, University of Twente, the Netherlands. [**Conference Paper**]**Nourin, F.T.J.**, Xu, C. 2018. Assessment of Regeneration Time of an Evergreen Forest After Wildfire Using LANDSAT Images, Regional AAG conference, Kansas State University. [**Poster Presentation**]Urban growth sustainability estimation from Land Use Land Cover (LULC) categories: A case study of utilizing Google Earth Engine (Tentative Title). [**Dissertation 2022**].An Exploratory Study on the Impact of Wildfire Events in Yellowstone National Park using Biased Flickr Data. [**Dissertation 2019**].

HONORS & AWARDS

- **Burgess Graduate Scholarship**- Department of Community and Regional Planning, Iowa State University, May 2022.
- **Outstanding Graduate Student**- Department of Geography, University of Wyoming- May 2019.
- Induction at the **Geographic Honor Society 'Gamma Theta Upsilon'**- Eta Eta Upsilon Chapter- May 2019.
- **Bangladesh Government Scholarship** for Technical Education- May 2010.
- **International Student Scholarship** for academic excellence and co-curricular activities- Fall 2018, Spring 2019.
- **Graduate Student Travel Award**- Department of Geography, University of Wyoming- Jan 2019
- **Kleinhammer Endowment Award**- Department of Geography, University of Wyoming- Fall 2010, Spring 2018.

