

CURRICULUM VITAE

Tasnuba Jerin

Assistant Professor

Missouri State University

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Employment:

- August 2021 – Present Assistant Professor
Ozarks Environmental and Water Resources Institute
Department of Geography, Geology, and Planning
College of Natural and Applied Sciences
Missouri State University
- July 2020 – June 2021 Postdoctoral Research Fellow
School of Geography
University College Dublin, Ireland.
Research Project: *Hydromorphology of Irish Rivers*.
Sources of Project Funding: Head of School Research Funds
PI: Jacky Croke (University College Dublin)
Co-PIs: Louise Slater (Hertford College, University of Oxford, England), Conor Murphy (Maynooth University, Ireland), Ben Jarihani (University of Central Asia)

Education:

- 2015 – 2020 PhD Earth Surface Systems Program, Department of Geography
University of Kentucky.
Dissertation: *Biogeomorphology of Bedrock Fluvial Systems: Example from Shawnee Run, Kentucky, USA*
Committee members: Jonathan Phillips (Chair), Daehyun Kim, Alice Turkington, Jon Stallins, Ole Wendroth.
- 2013 – 2015 MS Major: Physical Geography
Department of Geography & Environment
University of Dhaka, Bangladesh.
- 2009 –2013 BS Major: Geography
Department of Geography & Environment
University of Dhaka, Bangladesh.

Research Interests:

Fluvial geomorphology, Biogeomorphology and biogeography, Earth system science, Application of geospatial techniques in fluvial/fluviokarst landscape analysis.

Publications:**Referred journal articles:**

1. **Jerin, T.** (2021). Scale associated coupling between channel morphology and riparian vegetation in a bedrock-controlled stream. *Geomorphology*, 375, 107562. DOI: 10.1016/j.geomorph.2020.107562
2. Van Dyke, C., **Jerin, T.**, Albright, N. and Blandford, B. (2021). Rapid Diagnostic Framework for Assessing Bridge and Culvert Sensitivity to Hydraulic Forcings. *Natural Hazards Review*, 22(2), 04021006. DOI: 10.1061/(ASCE)NH.1527-6996.0000452
3. **Jerin, T.**, and Phillips, J. (2020). Biogeomorphic Keystones and Equivalent: Examples from a Bedrock Stream. *Earth surface processes and landforms*, 45 (8), 1877–1894. DOI: 10.1002/esp.4853.
4. Ishtiaque, A., Masrur, A., Rabby, Y.W., **Jerin, T.**, and Dewan, A. (2020). Remote Sensing-Based Research for Monitoring Progress towards SDG 15 in Bangladesh: A Review. *Remote Sensing*, 12 (4), 691.
5. **Jerin, T.** (2019). Biogeomorphic effects of woody vegetation on bedrock streams. *Progress in Physical Geography: Earth and Environment*, 43 (6), 777 – 800.
6. **Jerin, T.**, and Phillips, J. (2017). Local efficiency in fluvial systems: Lessons from Icicle Bend. *Geomorphology*, 282, 119–130.
7. **Jerin, T.** and Rahman, M.M. (2015). Groundwater Depletion in Dhaka City, Bangladesh: A spatio-temporal analysis. *Oriental Geographer*, 56, 25-42.

Presentations:**Oral presentations:**

1. **Jerin, T.**, (2019). Biogeomorphic Keystones and Equivalent: Examples from a Bedrock Stream presented at *the Association of American Geographers (AAG) Conference* held on April 3-7 at Washington, DC.

2. **Jerin, T.**, (2018). Sycamore as a Biogeomorphic Keystone Species for a Bedrock Controlled Stream presented at the Southeastern Division of the American Association of Geographers (*SEDAAG*) *Conference* held on November 18-19, 2018, in Johnson City, TN.
3. **Jerin, T.**, (2018). Biogeomorphic Effects of Woody Vegetation on Bedrock Streams presented at *the* Association of American Geographers (*AAG*) *Conference* held on April 10-14 at New Orleans, Louisiana.
4. **Jerin, T.**, and Phillips, J. (2017). Local efficiency in fluvial systems: Lessons from Icicle Bend, presented at *the* Association of American Geographers (*AAG*) *Conference* held on April 5-9 at Boston, Massachusetts.

Poster presentations:

1. **Jerin, T.** and Turkington, A. (2017) A review of biotic roles in disturbance induced regime shifts of geomorphic systems, poster presented at *the 48th Annual Binghamton Geomorphology Symposium* held on October 14-15 at San Marcos, Texas.
2. **Jerin, T.** and Ishtiaque, A. (2015) Groundwater Depletion in Dhaka City, Bangladesh: A spatio-temporal analysis, poster presented at *American Geophysical Union (AGU) Conference* held on December 14-18 at San Francisco, California.
3. Ishtiaque, A., Nazem, N. I. and **Jerin, T.** (2015) Natural disaster induced losses at household level: A study on the disaster affected migrants, poster presented at *American Geophysical Union (AGU) Conference* held on December 14-18 at San Francisco, California.

Technical Skills:

- GIS & Remote Sensing: QGIS, ArcGIS, GeoDa, ERDAS Imagine, ENVI.
- Software: RiverTools, IBM SPSS, JMP, Oracle VM VirtualBox, Inkscape.
- Programming Language: R-statistics, Python.

Reviewer of Journal Articles:

- *Natural Hazards*
- *Science of the Total Environment*
- *Southeastern Geographer*
- *Spatial Information Research*

Awards/Grants:

- Research fellowship, Spring 2019. Department of Geography, University of Kentucky.
- Barnhardt Withington Funds, Department of Geography, University of Kentucky (2016-2017).
- NSF Doctoral Dissertation Research Improvement (DDRI) proposal to Geography and Spatial Sciences Program in 2017 (declined)
- Binghamton Geomorphology Symposium Scholarship (2017).
- Bangladesh-Sweden Trust Fund Travel Award (2016).
- Dean's Award, Faculty of Earth & Environmental Sciences, University of Dhaka (2016).
- Dhaka University Alumni Association Merit Grant (2010–2013).
- Environmental Science Fair Award, Ministry of Environment and Forest, Bangladesh (2012).
- World Environment Day Visual Presentation Award (Theme: Forest: Nature at your Service), Department of Geography and Environment, University of Dhaka (2011).

Classes Taught:

Missouri State University Courses

- GRY 142-Introduction to Physical Geography (General Education)

University of Kentucky Courses

- GEO 130: Earth's Physical Environment
- GEO 419: Introduction to Remote Sensing

Service Activities:

- Panelist of Navigating Academic Waters: Academic Job Applications Cyber Workshop organized by the American Geophysical Union Hydrology Section Student Subcommittee (2021).
- *Member*, Professional Development Committee, Department of Geography, University of Kentucky (2016 - 2017).
- *Organizer*, 16 Days Activism by UN-WOMEN against Gender Violence (2013).
- *Publication Secretary*, Environmental Club, Department of Geography and Environment, University of Dhaka, Bangladesh (2010-12).