Graduate Research Assistant (GRA) Position

The Ingram School of Engineering (ISOE) invites applications for **one highly motivated Ph.D. Graduate Research Assistant (GRA) position** under the supervision of <u>Dr. Subasish Das</u> in the Civil Engineering program. This appointee will focus on combination of three research thrusts: 1) causal artificial intelligence, 2) advanced spatiotemporal modeling, and 3) transportation safety and operation. The responsibilities of the GRA include:

- Assist in writing literature review
- Develop spatiotemporal models
- Apply different AI algorithms
- Maintain codes and repositories in GitHub
- Build and maintain complex web applications for real-time spatiotemporal data stream

This position will be supported by a research grant by Texas Department of Transportation (TxDOT). The expected start time for this position will be Fall 2022 and the contract can be extended to Summer 2024 based on performance in that role.

Required Qualifications

- Ph.D. student of Department of Geography/Computer Science/ Materials Science, Engineering, and Commercialization (MSEC) at Texas State University
- Expertise in Desktop GIS programs such as ArcGIS and QGIS and web GIS programs such as leaflet, and mapbox
- Familiar with programming languages such as Python, JavaScript, and R
- Experience in reproducible workflows such as Jupiter Notebook or knitr
- Good writing and presentation skills

Preferred Qualifications

- Familiar with cloud computing such as AWS or Azure
- Familiar with R Shiny tools
- Expertise in ArcPy and reproducible geospatial joining
- Good publication records

Application Procedures

Please email your resume and transcripts to Dr. Das at mvx13@txstate.edu