

Graduate/Undergraduate Research Assistant Positions at the Mobility Data Analytics Center CMU

Graduate/Undergraduate Research Assistant openings are available at the Mobility Data Analytics Center. The work will focus on integrating, visualizing and analyzing big transportation data, and help establish innovative multi-modal transportation network models. The chosen applicant will also help develop integrated webGIS solutions/tools for visualizing and analyzing transportation related data in the Pittsburgh/Philadelphia Metropolitan Region.

Dr. Zhen (Sean) Qian is an assistant professor jointly appointed at Engineering College and Heinz College (Schools of Information systems and public policy) at Carnegie Mellon University and Director of the Mobility Data Analytics Center. Dr. Qian's major research interests lie in the integration and optimization of civil infrastructure systems, particularly the transportation systems. The primary focus is to manage an aging and overcrowded infrastructure and urban systems, and to build a sustainable and resilient infrastructure network. He has applied theories of network flow, sensing and microeconomics to develop optimization and statistical models of infrastructure networks for efficient management of urban networks.

Desired qualifications:

1. Full-time, degree-seeking, self-motivated students with (or expecting) a Bachelor's degree in Engineering, Statistics, Computer Science, Economics or other quantitative areas;
2. In good academic standing;
3. Enthusiastic about programming and mathematical modeling;
4. Experience with at least one of the following web-based GIS mapping tools: Google Map, Mapquest, Bing Map, OpenStreetMap, ArcGIS Web, etc.
5. Proficient with one of web development languages and protocols.
6. Ability to develop and learn new techniques as required for the big data analytics.

Priorities will be given to candidates:

1. With computer science background;
2. With inter-disciplinary background;

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CMU provides a unique inter-disciplinary research environment for integrating intelligence and resources from a variety of research units. For more information,

Heinz College: www.heinz.cmu.edu

Civil and Environmental Engineering: <http://www.ce.cmu.edu>

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