David Vadney

Full-Stack Developer–Albany Visualization and Informatics Lab (AVAIL)

David Vadney is a graduate from SUNY Albany's Computer Science Department. As a member of Dr. Lawson's research team Mr. Vadney has worked on a number of transportation projects ranging from transit to traffic. Mr. Vadney specializes in applying machine learning and artificial intelligence to knotty transportation challenges. Mr. Vadney is considered one of the preeminent Data and Web technology developers within the SUNY Albany system. Mr. Vadney uses cloud-based GIS and visualization tools, leveraging the power of the web to make GIS systems easier to access, use, and understand. His projects tie spatial data— such as census, land use, and industry classification codes—to their effects on local and statewide transportation networks.

Education

- B.S. Computer Science and Applied Mathematics, B.S. Mathematics, State University of New York, University at Albany, 2014;
- M.S. Computer Science, State University of New York, University at Albany, 2016;

Professional Leadership

- Teacher's Assistant: CSI 333 Programming at the Hardware/Software Interface; CSI 402 Systems Programming; CSI 404 Computer Organization; CSI 409 Automata and Formal Languages

Professional Highlights

- Full Stack Developer, Albany Visualization and Informatics Lab (AVAIL), Lewis Mumford Center, University at Albany 2014-present
- Application Development Programmer, Cablevision, Bethpage, NY, Summer 2013
- Application Developer, Excelsior College, Summer 2014
- Research Tour, Southern University of Science and Technology China. GPU Server Admin, User Admin. Pedestrian, vehicle detection via Deep Learning

Related Projects

Realtime Travel Information for Improving Transit Ridership – NYSERDA, MTA

Mr. Vadney was a developer for a transit feed specification conversion tool for the Metropolitan Transit Authority (MTA) to simplify development for applications using transit data. This process required management of a server for requests made for transit data as well as development of an application programming interface (API) for converting General Transit Feed Specification Realtime (GTFS-R) to Service Interface for Realtime Information (SIRI).

Transit Market Analyst – New Jersey Transit

Mr. Vadney was a key developer for the web-based transit planning tool developed for NJ TRANSIT and sponsored by New Jersey Department of Transportation and the University Transportation Research Center. This modeling and transit network tool enables the NJ TRANSIT planners to run flexible models based on time of day, time of year, any subset of census tracts and is completely transferrable to any geographic area in the United States.

Entrepreneurial Ecosystem Atlas - Kauffman Foundation

Mr. Vadney was a developer of The Entrepreneurial Landscape Analysis Tool project funded by The Ewing Marion Kauffman Foundation. This web-tool combines data sets with leading indicator potential overlaying information visually and geospatially - highlighting business type distributions, property value and income, and can be accessed here: http://eea.availabs.org/