

Shuo Wang



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EDUCATION

Cornell University, College of Engineering, Ithaca, NY
Master of Science in Civil Engineering
Major: Transportation System Engineering
Minor: System Engineering

May 2017

Southeast University, School of Engineering, Nanjing, China
Bachelor of Engineer in Civil Engineering

May 2015

Selected Coursework: Urban Transportation Network Design & Analysis • Micro econometrics of Discrete Choice • Database Systems • Engineering Management Methods • Data Mining and Machine Learning • Modeling Public Systems

SPECIALIZED SKILLS

Computer: TransCAD, ArcGIS, VISSIM/VISUM, R, Cube, SQL, MATLAB, Python, MS Office.

Language: Native speaker of Mandarin, Fluent in English.

Certifications: Engineer in Training (EIT), Six Sigma Black Belt.

WORK EXPERIENCE

Consultant, *Steer*, Boston, Massachusetts

Summer 2017 - Present

- Worked on several travel demand forecasting projects as a main modeler;
- Contributed to development, validation, optimization and application of models and forecasted traffic and revenue for toll roads in Texas, Illinois and Colorado by performing sensitivity and scenario analysis;
- Focused on providing economic models to help clients make business decisions, for example analyzing the impact of integrated ticketing on Amtrak ridership and revenue;
- Provided a training seminar on TransCAD to junior staff.

Modeling and Analysis Intern, *Delaware Valley Regional Planning Commission*, Philadelphia, Pennsylvania Summer 2016

- Participated in the project of Travel Improvement Model 2.3 to forecast future land use and travel volumes on roads, rail, and bus for the greater Philadelphia urban area;
- Improved the accuracy of toll calculation model by more than 30% and designed a template by Excel VBA;
- Analyzed millions of TMCs to set a criterion of significant TMCs by R and Pivot table, reduced nearly 20% unnecessary workload of mapping TMC to OSM;
- Mapped thousands of count locations to road network in VISUM by Python;

RELEVANT ACADEMIC PROJECTS

Comparison of Time-Dependent Sequential Logit and Cox Proportional Hazards Models for Hurricane Evacuation with a Focus on the Use of Evolving Forecast Information, *Department of CEE, Cornell University* Spring 2017

- Figured out an efficient method to dynamically forecast the hurricane evacuation demand;
- Introduced some forecast covariates which were not mentioned before into the prediction of hurricane evacuation rate. Moreover, two travel demand models.

A Parking Lot Choice Problem with Limited Capacity, *Department of CEE, Cornell University*

Spring 2016

- Proposed two models and related algorithms to solve the parking lot choice problem with limited capacity in the mode of park-and-ride;
- Applied these two models for real-life projects in greater Philadelphia urban area.

PUBLICATIONS & PATENTS

- **S. Wang**, "Research of Urban Intersections Group Scoping." PEME Conference Proceedings, Switzerland: Applied Mechanics and Materials, 2014 (Indexed by EI/ISTP).
- Ding J, Yang M, Cao Y & **Wang S** (03/2014). "A combination-prediction method for the delay time at BRT stop", patented by State Intellectual Property Office of the People's Republic of China (Patent#: 2014101151742).