YU LIU

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SUMMARY

- Young and passionate new graduate with 4 years of research experience in various fields.
- Proficiency in programming, analytical and quantitative problem solving.
- Quick and independent learner of new skills. Adaptable in fast-paced working environment.

HIGHLIGHTED SKILLS

Programming C, C++, Java, Python, JavaScript

Data Analysis R, Matlab, SQL, Hadoop

Spatial Analysis ArcGIS, Google Maps API, ENVI

Languages English, Chinese

EDUCATION

University of California, DavisExpected June 2014Master of Science, Computer ScienceCS GPA: 3.8/4Master of Science, Civil EngineeringOverall GPA: 3.6/4

Peking University

July 2012

Bachelor of Science, Geographical Information System Overall GPA: 3.6/4

Bachelor of Arts, Economics

EXPERIENCE

NextSTEPS program

September 2012 - Present

Graduate Student Researcher

Institute of Transportation, UC Davis

- Rich experience for big data analysis with Postgresql and Hadoop. Interactive visualization with Javascript (d3.js) and HTML design. Work in a cross-discipline team.
- Currently responsible for modeling on power infrastructure transition evaluation with Matlab and R. Frequent communications with advisors and industry peers.

Geosoft Lab

December 2009 - July 2012

Research Assistant

Institute of RS & GIS, Peking University

- Conducted research on Human mobility analysis. Responsible for spatial-temporal accessibility assessment with Python and ArcGIS.
- Developed a probablistic model for taxi distribution in Matlab.

PROJECTS

Social Computing on GitHub

Ongoing

- Apply MySQL and Ruby to extract the relationship between pull requests, commits and issue discussions. Corporate machine learning to discover potential patterns in this "coding" social network.
- Visualization in d3.js and Cytoscape to show the interactions between users and projects.

IEEE 802.11p Evaluation in IVC

October - December 2013

- Use OMNeT++ to simulate the inter-vehicle communications and SUMO as a traffic flow generator.
- Under Veins framework, evaluate parameters such as communication density and beacon packets delays in different traffic load scenarios to judge the performance of IEEE 802.11p.