

Yingqian MEI (Cece)

<https://cecemei.github.io/>

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SUMMARY

- 3+ years of work experiences in programming.
- Languages: Python(intermediate), SQL, Java, Javascript, Bash, HTML, CSS.
- Platform & Library: Eclipse, Unix, PostgreSQL, Git, PostGIS, GDAL, pandas, numpy, matplotlib, networkx, fiona, shapely, Mapbox GL, Leaflet, Express.

PROJECTS

- Interactivate origin destination flows 2017
 - Inspired by deck.gl/ React/ Webpack. <https://github.com/cecemei/interactive-origin-destination-flows>
- Host a geo server to render over 50 million features. 2017
 - Built a web app for national-wide network editing using PostgreSQL (backend database), Express (web framework), Mapbox GL (front), and tiling techniques (SQL) visualizing over 50 million road segments. <https://github.com/cecemei/pg-server-code-tolls>

EXPERIENCES

- GIS Programmer Jul. 2014 – Current
Citilabs, Sacramento, CA
 - **Data engineering:** Set up PostgreSQL database server with commercial map data/ speed data/ traffic volume/ census/ employment/ survey data. Built an application to automated data inputs pipeline for traffic models from database, using SQL/ python/ bash / PostGIS spatial processing/ GDAL geo data conversion.
 - Developed large-scale quantitative traffic models for metropolitan areas on road network using traffic assignment and network data model.
 - Developed a tool to use Overpass API to access open street map and decode JSON to geo data.
- Travel Demand and Land Use Forecasting Intern Sep. 2013 – Mar. 2014
Puget Sound Regional Council, Seattle, WA
 - Used R and python, did reasonableness check and travel data analysis for activity-based model.
- Research Assistant Sep. 2012 – Aug. 2013
Civil and Environmental Engineering, University of Washington, Seattle, WA
 - Used R, python and batch, processed over millions of records in mobile social network data.
- Undergraduate Research Assistant May. 2011 – Jun. 2012
Remote Sensing and Geographical Information System, Peking University, Beijing, China
 - Used python and VBA, simulated mobile phone data using Monte Carlo method.

EDUCATION

- Master of Science, Transportation Engineering Sep. 2012 – Jun. 2014
University of Washington, Seattle, WA
- Bachelor of Science, Geographical Information System Sep. 2008 – Jul. 2012
Peking University, Beijing, China

PUBLICATIONS

- Cynthia Chen, **Yingqian Mei**, Yu Liu (Jan 2014). "Does Distance Still Matter in Facilitating Social Ties? The Role of Mobility Patterns and the Built Environment". Accepted for oral presentation at Transportation Research Board 93rd Annual Meeting, Washington, D.C.
- Chaogui Kang, Yu Liu, **Yingqian Mei** (Sep 2012). "Evaluating the Representativeness of Mobile Positioning Data for Human Mobility Patterns". Accepted for oral presentation at 7th International Conference on Geographic Information Science, Columbus, Ohio.

INTERESTS

- Running, hiking, tennis, badminton, ping pong, ukulele, yoga, interval training