

T. TOM LIN

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EXPERIENCE

Toole Design Group
GIS and Data Science
December 2018 - Present
Portland, OR

Senior Data Analyst

Developed new web mapping framework for obtaining public input on active transportation plans. Developed custom ArcGIS Python toolboxes for data analysis and infrastructure prioritization. Analyzed multimodal transportation networks – vehicular, bike, and pedestrian – for level of traffic stress and network connectivity. Analyzed the ridership trends of a micromobility (electric scooter) pilot in Spokane, WA.

TriMet
GIS-Information Technology
January 2017 - December 2018
Portland, OR

GIS Data Analyst

Developed web-based mapping applications. Provided agency-wide GIS support by analyzing spatial data to support service planning and analysis, Title IV equity analysis, and spatial data management. Developed a program to analyze a year's worth of ridership data to determine ideal locations for a fourth bus yard. Maintained and developed automated procedures to process and analyze spatial and network data (RLIS and OpenStreetMap).

Massachusetts Department of Transportation
Traffic and Safety Engineering Section
July 2014 - December 2016
Boston, MA

GIS Specialist

Performed data mining and analysis of state historical crash data. Identified traffic improvement candidates by analyzing Waze traffic data. Automated linear referencing of over 30,000 state-wide speed regulations. Developed an algorithm identifying potentially dangerous curves in collaboration with traffic engineers.

U.S. Department of Transportation
Volpe National Transportation Systems Center
Environmental Sciences and Engineering
December 2012 - June 2014
Cambridge, MA

Geographer

Developed Python programs and unit tests modeling and optimizing biofuel transportation across a multimodal network. Automated statistical report and thematic map production. Developed custom ArcGIS toolboxes to analyze commodity and flight data. Performed spatio-temporal analyses of railroad accidents.

Received Volpe Director's Recognition Award for Technical Excellence.

ATI Systems, Inc.
January 2011 - December 2012
Boston, MA

GIS Specialist

Identified at-risk populations by analyzing demographic, topographic and land cover data. Determined the siting of emergency warning sirens for community, campus, military and oil industry clients. S

EDUCATION

Harvard University
Graduate School of Design
September 2008 - May 2010
Cambridge, MA

Master in Urban Planning

Landscape and Ecological Urbanism; Transportation Policy and Environmental Limits; Environmental and Resource Economics; Planning and Environmental Law.

University of Michigan - Ann Arbor
September 2000 - May 2004
Ann Arbor, MI

Bachelor of Arts, Major: Philosophy, Minor: Biology

Coursework: Calculus III; Genetics; Biochemistry; Organic Chemistry I & II; Physics I & II; Plant Biology; General Ecology.

SKILLS

Software and Languages

Esri ArcGIS 10.7; Python 2.7; Leaflet; HTML 5/CSS 3; JavaScript; PostgreSQL/PostGIS; Oracle; GeoServer; Adobe Creative Suite.