#### T. TOM LIN

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#### **EXPERIENCE**

# Toole Design Group

GIS and Data Science December 2018 - Present Portland. OR

## Senior Data Analyst

Developed web-based mapping applications for public sector clients. Developed a new web mapping framework for the company to obtain public input on active transportation plans. Developed custom ArcGIS Python toolboxes for data analysis and infrastructure priortization. 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.

#### 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.

# **EDUCATION**

## Harvard University

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

# Master in Urban Planning

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; Symbolic Logic; Mathematical Logic

## **SKILLS**

#### Software and Languages

Esri ArcGIS 10.7; Python 2.7; Leaflet; HTML 5/CSS 3; JavaScript; PostgreSQL/PostGIS; Oracle; MS SQL Server; GeoServer