**Ford Motor Company**

**New Mobility Modeling Engineer**

**Location: Dearborn, MI or Palo Alto, CA**

**Job Description**

The candidate will play a pivotal role in guiding Ford’s future mobility and autonomous vehicle offerings and strategies. As part of Ford’s Mobility Research Group, they will join a varied and interdisciplinary group within Research and Advanced Engineering that is dedicated to cutting-edge research to improve transportation accessibility, mobility, and sustainability for all. They will work closely with other groups at Ford, including giving presentations to senior-level leadership. The candidate will act as a touchpoint with cities, universities, research labs, and other key stakeholders in helping Ford develop and simulate new and innovative mobility solutions, including microtransit, dynamic shuttles, smart cities, and connected and automated vehicles.

**Responsibilities**

* Support shared mobility simulations in a variety of US and international cities, for services such as shared AVs, dynamic shuttles, first-mile last-mile, micromobility, and good deliver/fulfillment.
* Intake existing travel demand models, both traditional four-step models and activity/tour-based models.
* Support efforts to evaluate and benchmark transportation modeling and simulation software both traditional software (e.g. CUBE and VISSIM) and those more focused on new mobility.
* Perform collaborative work with other groups internal and external to Ford, including AV and mobility teams, national labs, universities, cities, and Ford subsidiaries.
* Support the broader research goals, including journal articles, invention disclosures, patents, and other IP.
* Intake and analyze various urban data sets, especially with respect to freight, logistics, land-use patterns, and various new mobility services.

**Basic Qualifications**

* Master’s degree in Civil Engineering, Urban Planning, Industrial & Operations Engineering (with a focus in transportation or logistics), or related degree
* 2+ years’ experience in transportation or logistics modeling (coursework allowed). Examples include but are not limited to:
* Shared mobility modeling/simulation techniques using open source platforms such as MATSIM other agent-based tools
* Routing optimization (e.g. from freight or logistics)
* Traditional travel demand modeling (e.g. with TransCAD or CUBE) and/or activity-based modeling

**Preferred Qualifications**

* PhD. In Civil Engineering, Urban Planning, Industrial & Operations Engineering (with a focus in transportation or logistics) or related degree
* Professional work experience in the transportation modeling sector, either working directly for government entities (e.g. MPOs) or for private companies that have government agencies as customers (e.g. engineering consulting firms)
* Experience using open-source software via Github, especially transportation modeling software such as MATSIM, SUMO, etc.
* Programming skills such as Python, Java, and C++
* Comfortable giving presentations to a wide variety of different audiences
* Experience leveraging and manipulating urban data sets, including location-based and “big” data, for transportation modeling/analysis; relevant tools could include SAS, R, or MATLAB

Join our team as we create tomorrow! We believe in putting people first, working together, and facing challenges head-on, because we’re Built Ford Tough. We’re one team striving to make people’s lives better while creating value, delivering excellence and ultimately going for the win.

Visa sponsorship may be available for this position.

Ford Motor Company is an equal opportunity employer committed to a culturally diverse workforce. All qualified applicants will receive consideration for employment without regard to race, religion, color, age, sex, national origin, sexual orientation, gender identity, disability status or protected veteran status.

**To apply:** Submit an application at this link, <https://jobs.brassring.com/1033/ASP/TG/cim_jobdetail.asp?partnerid=25385&siteid=5186&Areq=35990BR> or go to the Careers page and search Requisition ID 35990BR, <https://corporate.ford.com/careers.html>