

Opportunity Title: Data Scientist Opportunity Reference Code: USDOT-2017-0006-JP

Organization U.S. Department of Transportation (DOT)

Reference Code USDOT-2017-0006-JP

Application Deadline 4/21/2018 12:00:00 AM Eastern Time Zone

Description Economic phenomena, such as on-line retail and e-commerce, have dramatically changed how goods are purchased and moved across the country and the world. This has major implications for how federal, state, and local government direct infrastructure spending, how policy makers make decisions and evaluate policies, and how planners make inform choices about their community's needs. Do you want to be part of the US Department of Transportation team that is modernizing the Commodity Flow Survey (CFS) to better capture goods movements in this new era? Come apply your data analytic research skills for the public good. We are looking for a paid Fellow trained in data analytics to mentor under a senior-level survey statistician. This is a great opportunity to hone statistical skills and to gain experience working with the Bureau of Transportation Statistics (BTS), one of the 13 independent Federal statistical agencies. The ideal candidate will be experienced in data compilation and statistical analysis, and knowledgeable of web scraping, machine learning, and data mining applications.

> The fellowship provides an excellent opportunity to provide input, direction, and creativity --thinking 'outside the box'-- into a project with the BTS and US Census Bureau Working Group, as well as offer skills development, skills training, and networking opportunities. Other benefits include a culture of work-life balance at USDOT, moving and health insurance stipend, and all the amenities of the Navy Yard neighborhood, including Yards Park. This fellowship position has the potential to be renewed up to 3 years.

> This fellowship is located in the Office of Survey Programs (OSP). The OSP designs, develops and conducts guality survey programs to capture information on the transportation system for effective use in transportation decision making. OSP staff work collaboratively across agencies, with all levels of project staff, with key internal and external stakeholders, and others to explore innovative methods of data collection and survey design in improving and initiating survey programs. Strong communication, coordination, and team work are needed to be successful in this role. In addition to assisting with developing and implementing transportation surveys, the selected candidate will be involved with researching and analyzing administrative and auxiliary data sources that can be used to further enhance transportation databases. He or she will also apply specialized data analysis techniques to collect, augment, and enhance BTS datasets. In addition, the candidate will assist with publishing and disseminating data that describe the characteristics, performance, use, and impact of the Nation's transportation systems.

Qualifications The ideal candidate will have a combination of the following:

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- Degree in Computer Science, Statistics, Applied Math or related field
- Experience with modern programming languages (e.g., SAS, Python, Java) and open source software (e.g., R)
- · Experience in data mining and statistical analysis
- Proficiency developing programs and scripts to support the collection,
- aggregation, processing, storage, analysis and publication of large datasets • Demonstrated ability to work with and connect multiple data systems and sources, understand various data structures, and apply data transformation methods using processes such as ETL

• Experience with investigating patterns and performing data interpretation of large datasets

- Experience with data analytic and visualization tools, such as Socrata and Tableau
- Demonstrated ability to transform information and data into documents, reports, and similar products that tell a compelling story
- Experience presenting results in a clear, effective, and attractive manner to inform next steps
- Ability to work across various offices, work units and disciplines to obtain information, collaborate on best methods and approach, and validate findings and conclusions
- Experience working with forecast data and econometric modeling a plus, but is not required.

Eligibility • Citizenship: U.S. Citizen Only

- **Requirements Degree:** Any degree .
 - Discipline(s):
 - o Business (<u>2</u>
 - Computer, Information, and Data Sciences (<u>6</u>●)
 - Engineering (<u>1</u>⊙)
 - Mathematics and Statistics (<u>10</u>)
 - Social and Behavioral Sciences (3.)