

# Data Scientist

Impact Research, LLC  
Columbia, Maryland 21046

**Posted: May 27, 2024**

## About the Job

Impact Research is looking for a talented data scientist to join our growing company. In this role, you will bring analytical rigor and a sound understanding of statistical methods to the challenges facing the transportation industry. You will be part of a multi-disciplinary team of engineers and analysts working on a wide range of problems in transportation safety including the impact of automated driving, efficacy of advanced vehicle safety systems and the impact of policy interventions that affect travel. Tasks will include the selection and implementation of appropriate statistical and machine learning methods to identify key patterns in crash data, development of models to perform classification and labelling and the development of data driven insights to improve safety. You will demonstrate a willingness to collaborate, share knowledge and learn new techniques.

This is not an entry-level position. Candidates are expected to have practical experience in statistics and machine learning and to proactively bring this understanding to support our programs. This position supports ongoing research programs with BMW, Hyundai Motor Company and the Maryland Department of Transportation.

## About the Company

Impact Research is a small business located in Columbia, Maryland that specializes in transportation safety research and data science. Our work affects the safety of drivers, design of our vehicles and the roads we drive on. We develop and maintain data driven applications and pipelines to support safety insights regarding vehicle performance and real time decision making using field data. Our partners include a number of global automotive manufacturers, Tier 1 suppliers and governmental agencies responsible for motor vehicle safety in the US. We are a highly motivated company working on impactful projects in the automotive and highway safety industry.

## Responsibilities

- Work with external clients and internal project teams to translate business needs into research questions and technical requirements that effect change
- Identify existing methods or develop new methods to analyze data relating to driver behavior, traffic conditions, human language, and other phenomena
- Build statistical and machine learning algorithms into production software systems
- Analyze and interpret data, produce written summaries and present findings to internal and external audiences as needed
- Demonstrate willingness to teach others and learn new techniques
- Communicate analysis methods and findings to technical and non-technical audiences

## Basic Qualifications

- Master's degree or equivalent experience in statistics, mathematics, economics, computer science or related field
- 4+ years experience using a statistical programming language (R, SAS, NumPy/SciPy, etc.)
- 2+ years experience working with non-statistical programming language (Python, SQL, C/C++, etc.)
- 4+ years experience working with a relational database

- Experience with machine learning, implementing appropriate ML algorithms, model training and evaluation (TensorFlow, etc.)
- Demonstrated experience in Natural Language Processing (NLP) or other high-dimensional data
- Demonstrated ability to draw conclusions from data, communicate data driven findings and recommend actions

**Desired Qualifications:**

- Proficient understanding of distributed computing principles
- Proven ability to think creatively about challenging analytical problems
- Excellent communication and presentation skills, dealing with complex, quantitative topics
- A track record of project ownership and punctual, high quality deliverables
- Interest and understanding of transportation and the automotive industry

The interview process will involve a skills and understanding assessment during the interview process.

Salary commensurate with education and experience.