In AT&T Labs' Big Data Research organization, we develop new methods for analyzing massive data sets to learn about our network and our customers, and to improve services and operations. We are a pioneer in big data technologies – developing novel methodologies for statistical computing, event prediction, fraud detection, visualization, text mining, data stream management, data quality and anomaly detection, and privacy preserving measures such as data anonymization.

We have an immediate need for a PhD level Statistician with a passion for extracting insights from data to join our Statistics Research Department. We work on problems from all aspects of AT&T’s business, including new service creation, network design and optimization, marketing and customer care. These challenging business problems offer opportunities to establish external recognition while creating state-of-the-art, business-impacting solutions. You will make a difference: to our customers and employees by improving their experience; to our stakeholders by developing cost-effective solutions; and to the academic community as you contribute novel methodology or open source software that address real-world problems.

Our Research Lab enjoys a highly collaborative and academic environment, encouraging experimentation and innovation. Project roles are fluid – anyone can be the project lead or team member. Many researchers work directly with business unit leaders, and developing algorithms and solutions can be an interactive experience with them. Primary location can be Bedminster, NJ or New York, NY.

Desired areas of expertise
- Text mining - AT&T is modeling free-form text from millions of customer surveys, representative notes, and chats as one way to manage our business in real time. New methods are needed to keep up with the volume and complexity of this data.
- Spatiotemporal analysis of mobile data - The AT&T network generates billions of records per day from handheld devices, each one providing a data point in time and space. Understanding the dynamics of this data through time series and spatial statistics helps AT&T better serve its customers, improve its network, and develop new products and services.
- Predictive Modeling – We estimate models to predict customer behavior and sentiment, service disruptions, and event impacts. Models serve to both target, and to gain insight into variable relationships. Our rich customer and network data allows analysts to positively affect business outcomes and to pursue methodological research (comparing machine learning algorithms, for example).
- Statistical computation - AT&T is developing high-performance statistical models and algorithms (mostly in R) to leverage modern streaming and storage technologies. One example is the AT&T collaborative coding project RCloud http://rcloud.social/.

Qualifications
- PhD or equivalent in Statistics, Machine Learning, or a data science field with an extensive statistics curriculum.
- Established excellence, passion, and curiosity in applied research demonstrated through publications, new research techniques, open source contributions, and patents.
- Expertise working with large industrial scale data sets, and the ability to use software to manipulate data, prototype new tools, and extract actionable insights from that data.
- Capable of presenting outcomes of analytic solutions in a format easily understood by a non-technical audience.
- Demonstrated ability to develop new ideas from inception to prototype.
- Accomplished R programmer, and experience coding with other languages such as C/C++, Python, and Java.
- Experience with modern data management systems like Hadoop, NoSQL, and Spark.
Candidates with 5+ years of relevant experience may be considered for a more senior position.

Apply at [http://connect.att.jobs/search/1628166](http://connect.att.jobs/search/1628166) where two job listings appear, one for each location. Only one need be filled out – location may be determined later. Qualified candidates will be asked to submit a Research Statement and 3-5 references. Please visit [http://www.research.att.com](http://www.research.att.com) to learn more about AT&T Research.