MEGHA JAIN

Selected Experience

Lotik Labs at Samsung Next — New York, NY
Data Scientist — March 2017 to Current
- Developing models to predict water flow and identify leaks at point-of-use as part of a 2-3 person team, leveraging signal processing theory, neural nets (Theano/lasagne) and machine learning (palladium/scikit-learn) techniques.
- Analyzing and visualizing sensor performance data using matplotlib and Bokeh as required to support business development, firmware engineering, and software engineering teams.
- Constructing data pipelines to automatically consume, clean, and load sensor data into a Postgres database for use in our API, backend modeling efforts, and internal decision-making processes.

Metis: Data Science Bootcamp — New York, NY
Data Scientist — Sept. 2016 to Dec. 2016
- Conducted a predictive analysis to determine whether extreme weather events will be declared FEMA emergencies and documented their occurrences in a D3 map.
- Produced a flask app that aggregates art exhibits taking place within the New York metro area and recommends related exhibits based on their press releases.
- Used natural language processing to track how the conversation around climate change has evolved over time and across US regions visualizing the results in a D3 interactive dashboard.

Urban Green Council — New York, NY
Research Associate — Jan. 2016 to Aug. 2016
- Analyzed Local Law (LL) 84 benchmarking and LL87 audit databases using seaborn and scikit-learn.
- Contributed to the writing and data visualization of the NYC Mayor's Office of Sustainability's fourth benchmarking report with topics including identifying trends in energy and fuel use and analyzing the impact of steam distribution on energy use.
- Supported project management with responsibilities including researching technical content for projects and coordinating with external organizations.

Research Fellow — June 2015 to Dec. 2015
- Devised and refined Python data cleaning methodologies for Local Law (LL) 84 benchmarking and LL87 audit databases.
- Provided data analysis and research support for policy proposals to update the New York City Energy Code.

Research and Policy Intern — Jan. 2015 to June 2015
- Devised a methodology using Python to clean New York City's Local Law (LL) 84 public benchmarking data, identify and code errors found within, and analyzed the data to support the development of UGC's benchmarking website (www.metered.nyc).
- Researched case studies and worked with website developers and the communications team to accurately report and depict summary statistics.

German Academic Exchange Service (DAAD) — Berlin, Germany
Research Fellow — Oct. 2013 to Aug. 2014
- Awarded a fellowship to conduct research in Berlin and served as a research assistant to the India-Europe Multilevel Climate Governance Network.
- Organized a research conference bringing together 25 researchers from Germany, the Netherlands, and India to discuss governance and transitions to a low-carbon economy.

ICF International — Washington, D.C.
Research Assistant — Dec. 2012 to Aug. 2013
- Consulted to the U.S. Environmental Protection Agency's (EPA) ENERGY STAR for Labeled Products program, which aims to promote energy-efficient products in the marketplace.
- Analyzed unit shipment data from 1000+ manufacturer partners to determine the market penetration of ENERGY STAR products.
- Supported the development of an online tool for consumers to access information on ENERGY STAR qualified products.
- Developed standard operating procedures that addressed key program challenges, e.g., communicating eligibility requirements to 1000+ partners and 10+ certification bodies.

Contact

- ✉ meghaj@alumni.upenn.edu
- 🌐 megha-jain.com
- 📍 Brooklyn, NY 11216
- in megha-jain
- ◯ mjain-1

Education

University of Pennsylvania
BA International Relations, Sustainability and Environmental Management 2012
GPA: 3.94/4.0, Phi Beta Kappa, Summa Cum Laude

Skills

DATA SCIENCE
Python
Scikit-Learn
Pandas
palladium
Theano/Lasagne/nolearn
Natural Language Processing (NLP)

DATABASE
PostgreSQL

DATA VISUALIZATION
matplotlib
Seaborn
D3.js
Bokeh

LANGUAGE
Spanish

Awards

European Forum Alpbach · Scholarship Grant — Aug. 2014
Awarded a grant to attend and participate in seminars with topics ranging from energy transitions to decision making under uncertainty in Alpbach, Austria

Athgo International Climate Change and Entrepreneurship Conference 2nd Place — Aug. 2011
Awarded $2,000 as part of a 5-person team for a sustainable business proposal