MEGHA JAIN

Selected Experience

Lotik Labs at Samsung Next

Data Scientist

New York, NY Mar 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 decisionmaking processes.

Metis: Data Science Bootcamp

Data Scientist

New York, NY Sep 2016 to Dec 2016

- Used regression techniques to analyze whether winning at a film festival impacts financial success using data scraped from Wikipedia, BoxOfficeMojo, and IMDB.
- 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 the country and documented the results with a D3 interactive
 dashboard.

Urban Green Council

Research Associate

New York, NY 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 New York City 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 Jun 2015 to Dec 2019

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

Research and Policy Intern

Jan 2015 to Jun 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.

ICF International

Research Assistant

Washington, D.C. 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

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- njain-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

German Academic Exchange Service
DAAD Research Fellowship

Oct 2013

Awarded a 10-month fellowship to research environmental policy at the Free University of

Athgo International Climate Change and Entrepreneurship Conference

Aug 2011

• 2nd Place Awarded \$2,000 as part of a 5-person team for a sustainable business proposal