Navraj (Navie) Narula

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Education

M.S. in Journalism and Computer Science May 2018
Columbia University, *New York, NY*

B.S. in English Education and Computer Science May 2016
Boston University, *Boston, MA*

Experience

Computer Science Advisor (Contract), Codecademy Aug 2018 - Present
New York, NY
Conduct one-on-one lessons and provide project feedback to help students of various levels understand Python, JavaScript, and SQL. Write and review technical content for blog.

Data Engineering Intern, Axios June - Aug 2018
New York, NY
Built data pipelines to gather platform engagement data using Python and AWSGlue, augmenting data stored in S3 and Google BigQuery by thousands of records. Created and deployed LDA models with AWS SageMaker to auto-tag news articles with 80% accuracy in a 20-category distribution.

Artificial Intelligence (AI) Researcher, Creative Machines Lab Sept - Dec 2017
New York, NY
Designed and implemented a persistence algorithm and an autoregressive model using time-series forecasting to predict future movements of a soft, artificial muscle. Visualized muscle movements pertaining to each time second and load force for continuous datasets.

Software Engineering Intern, Quid Jun - Aug 2017
San Francisco, CA
Built and deployed website to display info pertaining to Quid's backup system using Docker, Flask, SQL Alchemy, and Python, increasing developer productivity to catch failures faster. Unpacked contents of API to create mapping and define settings for indices on Elasticsearch to ease database search. Wrote test cases to automate checks for an infrastructure engineering task.

Teaching Assistant, Columbia University Sept 2016 - May 2017
New York, NY
Helped students understand control flow, functional design, and complex libraries using Python. Selected as 3 of 10 course assistants to lead lab lectures. Provided additional assistance during office hours.

Data Storytelling Researcher, Boston University Jan - May 2016
Boston, MA
Designed taxonomy and implemented a relational database in MySQL Workbench to store info on criminal case reversals, worked with faculty member to deliver report on functionality of search and how to perform robust queries, received funding to attend NICAR conference in Spring 2016.

Projects

Obtaining Cycle Breakpoints and Predicting Next Cycles Dec 2017
Examining the Language of Eating Disorders in Social Media April 2017
Randomness vs. Restriction in Markov Models of Natural Language May 2016

Open-Source Contributions

Emotion Audio Classification March 2018 - present
Built software to detect emotion in short speech utterances using Python. Utilized pyAudioAnalysis to perform linear classification based on multi-class categories spanning emotion labels. Extract features such as pitch, volume, and silence using Praat. Working to improve speech classification distinction among gender and races.

Other

Community Chair (Women in Computer Science) - Sponsorship Chair (DivHacks, a diversity hackathon) - Grace Hopper Scholar (Facebook) - Brown Institute Scholar (Columbia Journalism School)