

Apoorva Havanur

ahavanur@andrew.cmu.edu | ahavanur.github.io | 408-315-7249 | U.S Citizen

Education

Carnegie Mellon University, 2014 - 2018

B.S in Statistics and Machine Learning, additional major in Economics, minor in Computer Science
Andrew Carnegie Society Scholar, Alpha Kappa Psi Co-ed Professional Business Fraternity
GPA: 3.71/4.0

Relevant Coursework:

10-601: Introduction to Machine Learning, 11-441: Natural Language Processing, 36-462: Data Mining, 36-402: Advanced Methods in Data Analysis, 15-210: Data Structures and Algorithms, 15-150: Functional Programming, 73-374: Econometrics II

Work Experience

Facebook

Data Science Intern, Growth Infrastructure

May 2017 – Aug 2017

- Identified and engineered features for patent pending model to classify business phone numbers, utilizing terabytes of addressbook data and contactpoint relationships stored in Hive storage, with 98% precision and recall value.
- Uncovered significant data quality issues in essential data pipelines and worked with engineering teams to resolve client-side issues with collection that affected more than 46% of records
- Created pipelines and dashboards to monitor and better understand various stages of experiment lifecycle captured by internal experimentation tool, identifying areas of improve for internal tools development.

IBM Watson Health

Data Science Intern, Innovations Team

May 2016 – Aug 2016

- Implemented and deployed risk model for coronary heart disease for use by healthcare providers across the country using Java and MapReduce, using records from more than 55 million unique patients stored in Hbase
- Designed novel fuzzy string matching algorithm for use in medical record standardization platform that increased detection of mismatches by 600%, while decreasing the number of false positives by over 50% compared to previous algorithm.
- Received commendation for clarity and impact of work from Watson executives after presenting findings during the summer finale event in Austin, Texas.

Carnegie Mellon University

Research Assistant

Aug 2015 – Jan 2016

- Worked with Professor Joachim Groeger to develop model for taxi drivers to optimize route and rider selection using data collected on more than one million taxi trips.
- Used R to cleanse data and create distributions of fare amounts, pickup/dropoff locations, and duration

Projects

Pittsburgh Civic Light Opera Donor Report

- Created interactive data visualization tool to aid non-profit theater company in analyzing more than 20 years of donation and ticketing data using R Shiny and ggplot (<https://ahavanur.shinyapps.io/clo-research-demo/>)
- Created prediction models for suggested donation amount using ticketing and past donor information, and presented findings at undergraduate research colloquium (Meeting of the Minds).

Tartan Data Science Cup – 1st Place Overall

- Analyzed Citibike dataset for CMU data science competition, working in team of 3 against more than 100 other students.
- Implemented Naïve Bayes classifier to determine gender of unknown riders
- Modeled bike traffic using graph theory and network tools in Python and determined most popular locations based on clustering coefficients and betweenness centrality of nodes.

MediMinder – Watson Health Hackathon

- Created interactive text-message based medication scheduling and reminder application for use by parents and children with chronic illnesses using Ruby on Rails and Twilio API.
- Utilized Watson Natural Language Classifier API to classify user inquiries about their medication and respond with appropriate information after querying database.
- Participated in a team of 4 against other undergraduate to PhD student teams across the country, coming in 4th.

Skills and Leadership

Resident Advisor

Aug 2015 – present

- Previously responsible for freshman floor of 33 residents and 40 upper-class residents
- Received training in conflict resolution, identifying problematic behavior and first responder training.
- Organized and ran dorm-wide events such as group outings, socials, and discussion groups.

President, Moneythink CMU

Sep 2014 - present

- Taught high school students in low-income areas of Pittsburgh lessons on financial literacy and good financial planning.
- Co-developed website (www.moneythinkcmu.org) as an informational and recruitment tool
- Oversaw creation and execution of first ever campus-wide financial innovation hackathon (<https://www.tartanfinnovation.com>)
- Led board of 10 members into expanding the chapter in size and reputation around campus

Programming: Java, Python, R, SQL (all proficient), SML, MapReduce, Hadoop/Hbase, Ruby on Rails, C (intermediate)

Other: Microsoft Office, Public Speaking, Conflict Resolution, Basketball, Standup Comedy