Rahul Nath

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Last Updated on 29th September 2016

EDUCATION

GEORGIA TECH
M.S. in Computer Science
Expected June 2018 | Atlanta, GA
Specialization in Machine Learning

UDACITY
N.D. in Machine Learning
Expected December 2016 | Udacity

WILLIAMS COLLEGE
B.S. in Computer Science
B.A. in Economics
June 2015 | Williamstown, MA
Class of 1960's Economics Scholar
Dean's List

GCHS, VALEDICTORIAN
June 2011 | Glen Cove, New York

SKILLS

PROGRAMMING
Main Languages:
Python • SQL • C • Java

Recent Experience with:
scikit-learn • pandas/numpy
PostgreSQL • AWS EC2/Redshift •
HTML/CSS • Unix/Bash

Past Experience with:
R • x86/ARM Assembly • STATA •
Node.js • WEKA • Selenium

Third-Party Tools:
Chartio • Optimizely A/B • Slack • Git
• JIRA • Trello • Asana • Reflektiv

SPOKEN LANGUAGES
Spanish (Intermediate Proficiency)
French (Beginner Proficiency)
Bengali (Intermediate Proficiency)

COURSEWORK

High Performance Parallel Algorithms
Data Structures and Algorithms
(Also served as Teaching Asst)
Abstract Algebra
Econometrics and Data Analysis

EXPERIENCE

UDACITY | Machine Learning Course Manager & Developer
Aug 2015 – July 2016 | Mountain View, CA

- Taught use of tools such as scikit-learn, pandas, numpy, and Jupyter Notebook and ML techniques to over 2,000 Machine Learning Nanodegree students, and Intro to Programming.
- Automated student YouTube data collection for all of Udacity. Wrote Python cron job that queried Analytics servers collecting over 8,000,000 data points, formatted data, stored data on company AWS RedShift server, and pipelined it into Chartio.
- Developed student-to-student video interfacing platform and integrated Slack orientation bot for over 2,000 students in the Intro to Programming ND.

NAVAL RESEARCH LABORATORY | Summer Contractor
July 2014 – Sept 2014 | National Harbor, MD

- Implemented a tool in Python that reduces the time required for A.I. robot to learn actions from exponential to polynomial time. Reducing the processing time made it feasible to automate the process of knowledge acquisition.
- Designed and implemented an algorithm in Lisp and Python to reduce prepositional and word-sense ambiguity in interpreted speech using contextual information and machine learning.

MOBIQUITY | Android Developer Intern
May 2014 – July 2014 | Wellesley, MA

- Implemented communication and data collection between an Amazon EC2 server instance and an Android application for Mobiquity's deltaIQ platform, which forms the basis of their health monitoring service Used Node.js.
- Implemented the UX, UI, and business logic for an indoor navigation app using iBeacons, Google Glass and AWS EC2, DynamoDB, S3, Kinesis, and Cognito.

WILLIAMS COLLEGE HONORS RESEARCH
Sept 2014 – Dec 2014 | Williamstown, MA

- PrePost2. Using selenium, multiprocessing pools, and BeautifulSoup, I created a webscraper to collect documents with sparse descriptions of action sequences. Docs were used to learn static predicates to generate domain models, making domain models 25% more accurate for automated planning engines.

PROJECTS

"Predicting Boston Housing Prices"

- Evaluated the performance and predictive power of a model that has been trained and tested on data collected from homes in suburbs of Boston, Massachusetts. Model was then used to predict the price of said homes.

Medicost

- Created website to easily search cost requests and receipts made by doctors to insurance companies, along with other information regarding the doctor's practice. Data was scraped from the Dept. of Health and Human services.

"From Play to Work: Effect of Youth Programs on Dropout Rates"

- An econometric study I performed exploring the possibility that attendance of extracurricular programs intended to motivate and engage students – including youth programs and dropout prevention programs – is associated with a lower likelihood of dropping out for at-risk students. Analysis available upon request.