Rahul Nath

http://therahulnath.com | rahul.nath.eph@gmail.com
516.491.9232 | Github: /rahul-nath

Last Updated on 2nd October 2016

EDUCATION

GEORGIA TECH
M.S. in Computer Science
Expected June 2018 | OMSCS
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 ND Course Manager
Aug 2015 – July 2016 | Mountain View, CA

- Re-invented Intro to Programming Nanodegree (IPND) into exploratory program to other NDs, increasing student enrollment by over 20% – the fastest growing ND at Udacity.
- QA'd and created content for Machine Learning, DevOps & Android Basics. Taught use of iPython/Jupyter Notebooks, pandas, and sk-learn.
- Created webcast teaching sessions and authored lessons on virtualization and Python optimization constructs.

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

- Implemented a tool in Python for A.I. robot to learn actions in polynomial time – a previously intractable problem – making 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. Also used Node.js.
- Created the UX, UI, and business logic for an indoor navigation app using iBeacons, Google Glass, and AWS EC2, DynamoDB, S3, Kinesis, and Cognito.

PROJECTS

YouTube Data Pull

- Automated student YouTube data collection for all of Udacity. Wrote Python cron job that queried YouTube Analytics servers collecting over 8,000,000 data points, formatted data, stored data on Udacity's AWS RedShift server, and pipelined it into Chartio as a data source.

PrePost2 (Code available.)

- 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.

"Predicting Boston Housing Prices" (Analysis available.)

- 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.

"From Play to Work: Effect of Youth Programs on Dropout Rates" (Paper available.)

- 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.