

Rahul Nath

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EDUCATION

Georgia Tech

M.S. IN COMPUTER SCIENCE

Part-Time | OMSCS

Specialization in Machine Learning

Udacity

N.D. IN FULL-STACK WEBDEV

Expected December 2016 | Udacity

Williams College

B.S. IN COMPUTER SCIENCE

B.A. IN ECONOMICS

June 2015 | Williamstown, MA

Dean's List, Class of 1960 Economics Scholar

GCHS, Valedictorian

June 2011 | Glen Cove, New York

Relevant Coursework

High Performance Parallel Algorithms
Data Structures & Algorithms (Also T.A'd)
Operating Systems

SKILLS

Programming

Main Languages:

Python • SQL • C • Java

Familiarity with:

Javascript • Scala • C++ • Lisp

Recent Experience with:

HTML/CSS • Google App Engine

• Unix/Bash • Docker • Vagrant • AWS
EC2/Redshift • PostgreSQL • Chef

Past Experience with:

Selenium • Ruby on Rails

• Node.js • Heroku • BeautifulSoup

Third-Party Tools:

Chartio • Optimizely A/B • Slack

• Git • JIRA • Trello • Asana • Reflektiv

Spoken Languages

Spanish (Intermediate Proficiency)

French (Beginner Proficiency)

Bengali (Intermediate Proficiency)

OPEN-SOURCE

- String matching: [Fuzzy-Wuzzy](#)

EXPERIENCE

Udacity | 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.
- Created webcast teaching sessions and authored lessons on virtualization and Python optimization constructs.
- QA'd and created content for Machine Learning & Android Basics.

Naval Research Laboratory | 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.
- Created the UX, UI, and business logic for an indoor navigation app using Node.js, iBeacons, Google Glass, and AWS EC2, DynamoDB, S3, Kinesis, and Cognito.

PROJECTS

TA Sessions

- I conceptualized and developed Udacity's first student-to-student video platform with integrated Slack orientation bot for over 2000 students. Leveraged Google Cloud Platform and Ruby on Rails.

YouTube Data Pull

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

PrePost2

- Using selenium, multiprocessing pools, and BeautifulSoup, I created a webscraper to collect documents and suggest 25% more accurate environment domain models to be used by an artificially intelligent agent.

Medicost (MIT Hack Medicine Team, 24-hr hackathon)

- Created website to easily search cost requests and receipts made by doctors, standardizing medical procedure costs for over 44 million Americans without medical insurance. This project used Django, Grunt, JQuery, and Bootstrap.

Virtual Assembly Language Emulation

- I wrote a virtual emulator for a RISC language using a CISC language. I made a JIT compiler to optimize, finding a trade-off of 26 CISC instructions for every RISC instruction.