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, DevOps & 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. 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

TA Sessions
- Conceptualized and developed Udacity's first student-to-student video platform with integrated Slack orientation bot for over 2000 students enrolled in IPND. Leveraged Python, Google App Engine, and Ruby on Rails.

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
- 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.

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

Virtual Assembly Emulation
- Wrote a virtual emulator for a RISC assembly instruction set, WARM, using a CISC assembly instruction set, WIND. Wrote a JIT compiler to optimize.