

# Rahul Nath

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## EDUCATION

### GEORGIA TECH

M.S. IN COMPUTER SCIENCE  
(PART-TIME)

Expected June 2018 | Atlanta, GA  
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  
Class of 1960's Economics Scholar  
Dean's List

### GCHS, VALEDICTORIAN

June 2011 | Glen Cove, New York

## SKILLS

### PROGRAMMING

Main Languages:

Python • SQL • Java • C

Recent Experience with:

HTML/CSS • Google App Engine •  
Unix/Bash • Docker • Vagrant • AWS  
EC2/Redshift • PostgreSQL • Chef

Past Experience with:

Selenium • Ruby on Rails • Javascript •  
Node.js • Heroku

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)  
Operating Systems  
Mobile Application Development

## EXPERIENCE

### UDACITY | DEVELOPER & COURSE MANAGER

Aug 2015 – July 2016 | Mountain View, CA

- Conceptualized and developed Udacity's first student-to-student video platform with integrated Slack orientation bot for over 2000 students enrolled in the Intro to Programming Nanodegree. Leveraged Python, Google App Engine, and Ruby on Rails.
- 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 as a data source.
- Created webcast teaching sessions and authored lessons on virtualization and other topics. Helped students through projects for Intro to Programming and Machine Learning Nanodegrees.

### 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. 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.

### 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

### 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.

### The People's Lobby

- Website to engage citizenry in legislative process. (In development.)

### Virtual Assembly Emulation

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