

# Rahul Nath

<http://therahulnath.com> | [rahul.nath.eph@gmail.com](mailto:rahul.nath.eph@gmail.com)  
516.491.9232 | Github: [rahul-nath](#)

## EDUCATION

### **Georgia Tech**

**M.S. IN COMPUTER SCIENCE**

Part-Time | 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

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)

Econometrics & Data Analysis

## SKILLS

### **Programming**

Main Languages:

Python • SQL • C • Java

Familiarity with:

Scala • C++ • Javascript • Lisp

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)

## OPEN-SOURCE

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

## EXPERIENCE

### **Udacity | MACHINE LEARNING 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 | 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 environment knowledge acquisition.
- Designed and implemented an algorithm in Lisp and Python to reduce prepositional and word-sense ambiguity in interpreted speech using contextual information.

### **Mobiquity | ANDROID DEVELOPER INTERN**

May 2014 – July 2014 | Wellesley, MA

- Implemented communication and data collection between an EC2 server and an Android application for Mobiquity's deltaIQ platform, which now 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

### **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.

### **"Predicting Boston Housing Prices"**

- I 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"**

- 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.