

# RITWIK GUPTA

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## Skills

### LANGUAGES

Python  
Java  
Scala  
Swift  
C  
MIPS  
HTML  
CSS  
JavaScript

### TECHNOLOGIES

Apache Spark  
Hadoop  
Apache Hive  
Apache Cassandra  
Mesos  
YARN  
OpenMP  
OpenMPI  
TensorFlow  
CUDA  
Flask  
Android

### COURSEWORK

Discrete Mathematics  
Data Structures  
Computer Organization  
Systems Programming  
Algorithms  
Parallel Computing  
Compilers  
Operating Systems  
Computer Vision  
Cloud Computing  
Linear Algebra  
Calculus 1/2  
Biology 1  
Chemistry 1/2

## Education

University of Pittsburgh  
BS Computer Science 2017  
GPA: 3.710

## Employment

### Apple

#### Data Science Intern

Cupertino, CA  
May 2016 to Current

Applied Machine Learning team. Implementing clustering algorithms on a large dataset that requires deep feature selection and natural language processing.

### Staples SparX/Staples Innovation Labs

#### Data Science Intern

San Mateo, CA  
May 2015 to Aug 2015

Built recommender systems for Staples, the world's 2nd largest e-commerce retailer. Created models were put into production on Staples.com and emails, outperforming existent models. Utilized novel ML modeling using NLP techniques.

Worked with Apache Spark, Hadoop, Mesos, YARN, and Python.

### University of Pittsburgh (Chemistry)

#### Full-Stack/Mobile Developer

Pittsburgh, PA  
Jan 2015 to Current

Developing the Pitt Quantum Repository, a web platform for molecular visualizations and data. PQR is currently in use by Pitt's general chemistry and biology classes. Working with Flask, Bootstrap, LESS, JavaScript, HTML, and Grunt.

### Rectangle

#### Android Developer

Pittsburgh, PA  
Jun 2014 to Current

Created Pittsburgh Realtime Tracker, an Android application to track the public buses of Pittsburgh in real-time. The app has over 15,000 users and is the most popular bus tracking app in the region.

### University of Pittsburgh (Biomedical Informatics)

#### Data Science Intern

Pittsburgh, PA  
Jun 2014 to Sep 2014

Creating machine learning algorithms to categorize driver and passenger mutations given whole-genome data of people with cancer.

Worked with Python, Theano, nVidia CUDA, and Scikit.

### University of Pittsburgh (Biomedical Informatics)

#### Research Intern

Pittsburgh, PA  
Jun 2013 to Sep 2013

Analyzing the frequency and distribution of palindromes in the entire human genome, with focus on acute myeloid leukemia. Developed tools in Java, Python, HTML, JavaScript, and D3.

## Awards

Pitt SmashMash Entrepreneurial Challenge · Winner

Nov 2014

Developed a business plan and application for a medical student-to-university healthcare startup.

NASA International SpaceApps Pittsburgh · Winner + Best Use of Data

Apr 2015

Created a tool that allowed scientists to better tag their data using Twitter.

Red Bull Hack The Hits · Winner

Apr 2016

Created a all-in-one string instrument using an Arduino and cardboard. Featured in Forbes magazine.

## Publications

Distribution of Palindromes in the Human Genome. Gupta, Cheng, and Hammond. Journal of Pathology Informatics. March 28, 2014. J Pathol Inform 2014, 1:12.