

# RITWIK GUPTA

✉ ritwikg2004@live.com  
🌐 ritwikgupta.me  
in ritwikgupta  
🔗 ritwikgupta

## Skills

### LANGUAGES

Python  
Java  
Scala  
Swift  
MATLAB  
C  
MIPS  
HTML  
CSS  
JavaScript

### TECHNOLOGIES

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

### COURSEWORK

Advanced Multimodal Machine Learning  
Computer Vision  
Cloud Computing  
Parallel Computing  
Network Security  
Compilers  
Operating Systems  
Data Structures/Algorithms  
Computer Organization  
Systems Programming  
Discrete Mathematics  
Linear Algebra  
Calculus 1/2  
Non-Parametric Statistics  
Biology 1  
Chemistry 1/2

## Education

University of Pittsburgh  
BS Computer Science 2017  
Related Areas: Math, Statistics, History

## Employment

Apple Cupertino, CA  
**Data Science Intern** May 2016 to Aug 2016  
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 San Mateo, CA  
**Data Science Intern** 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) Pittsburgh, PA  
**Full-Stack/Mobile Developer** 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 Pittsburgh, PA  
**Android Developer** 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) Pittsburgh, PA  
**Data Science Intern** 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) Pittsburgh, PA  
**Research Intern** 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. Ganapathiraju, Gupta, Cheng, and Hammond. Journal of Pathology Informatics. March 28, 2014. J Pathol Inform 2014, 1:12.