RITWIK GUPTA

ritwikg2004@live.com
ritwikgupta.me
ritwikgupta
ritwikgupta

Skills

LANGUAGES

Python
Java
Scala
Swift
MATLAB
C

TECHNOLOGIES

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

COURSEWORK

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

STATISTICAL MACHINE LEARNING

Neural Networks
SVM
Linear/Logistic Regression
Hierarchical Clustering
Dimensionality Reduction
Kernel Methods

Education

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

Employment

UPMC Enterprises — Pittsburgh, PA
Software Engineer — Nov 2016 to Current
Working on data coherency platforms and the IBM Watson AI XPrize.

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 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.