Brian Gillespie

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EDUCATION

Northeastern University, Seattle WA

Sept. 2014 – Present

Candidate for Master of Science in Computer Science

GPA of 3.6

Key Coursework: Advanced Software Development, Data Mining, Parallel Programming in MapReduce, Algorithms

The University of Georgia, Athens, GA

Dec. 2013

Bachelor of Science in Physics, magna cum laude

GPA of 3.8

Honors and Achievements: Recipient of the Charles H. Wheatley Award for Excellence in Physics

TECHNICAL PROJECTS

Project Feed 1010: Resources and Networking for Aquaponics Farms

https://www.systemsbiology.org/research/project-feed-1010/

- Spearheaded development of an interactive map page and graph analysis page. Users may explore aquaponics farms around the world and analyze their measurement data. Measurements can be plotted as trends over time, or against each other.
- Migrated an existing MySQL database into a cloud solution, using Amazon RDS
- Designed RESTful APIs to allow requests for aquaponics system data through the ProjectFeed Web App

Developing a Software Architecture for Healthcare Data Analytics

- Engaged in research developing a software architecture for processing increasingly large Medicare datasets collected by the Centers for Medicare & Medicaid Services as per the Affordable Care Act
- Trained a Naïve Bayes Classifier using spark.mllib, to identify Healthcare Provider Types based on their services rendered
- Implemented a Solr search platform to index data; assisted with creating various UI functionalities with Solr and SolrJ

PROGRAMMING EXPERIENCE

Languages

Python: Most comfortable Java: Comfortable Javascript: Somewhat Comfortable C: Somewhat comfortable

Key Technologies Used:

SQL Hive Spark Spring Flask Hadoop Solr

TECHNICAL EXPERIENCE

Northeastern University, Seattle, WA ITS HelpDesk Assistant

Dec. 2015 - Present

- Provided IT support to students and staff, and acted as liaison between staff and IT Administrators on Boston campus
- Instrumental in resolving a critical incompatibility in TLS protocols between Windows 10 devices and existing networking configuration

Google, Bothell, WA

Visual Data Specialist II

Oct. 2014 - Jan. 2016

- Provided feedback and suggestions for improving operations policies as well as software interfaces
- Tracked various bugs and wrote up issue reports for them. Provided some debugging to assist Tech teams with quickly identifying causes and potential fixes

UGA - Department of Physics and Astronomy, Athens, GA

Undergraduate Research Assistant

Jun. 2013 - Aug. 2014

- Researched the Finite Domain Time Dimension (FDTD) method for electrodynamics simulations
- Employed parallel computing methods on and the CUDA C language to increase computation speeds and reduce costs by enabling simulations to be run on smaller, cheaper GPUs

UGA - Nanoscale Science and Engineering Center, Athens, GA

Undergraduate Research Assistant

Aug. 2010 - Aug. 2011

- Collaborative research into increasing efficiency of dye-sensitized solar cells using various arrangements of TiO₂ nanorods, by assisting with data collection and analysis, as well as experimental design
- Manufactured a simple dye-sensitized solar cell for use in setting up an experimental design to measure electron conversion efficiency over various spectra of light