GRIFFIN BISHOP

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EDUCATION

Worcester Polytechnic Institute, Worcester, MA
Bachelor of Science, Computer Science Graduation: May 2019 GPA: 3.91 / 4.00
Master of Science, Computer Science Expected Graduation: May 2020 GPA: 4.00 / 4.00

SKILLS AND PROFICIENCIES

Python, PHP, JavaScript, React, Java, C, C++, Racket, Hadoop, Hive, MapReduce, Spark, PL/SQL, Bash, AngularJS, TypeScript, Functional Programming, Linux/Unix, Docker, Git, Keras, Jenkins

WORK EXPERIENCE

Wayfair, *Software Engineer Intern - Storefront Media* Boston, Massachusetts, Summer 2019

- *Advertiser Report Automation Tool***:** Used React, PHP, and Jenkins to create a full stack web application to automate the drafting of ad placement performance reports.
- This deliverable resulted in a time savings of 6 work days per month across 3 team members

Aristo Consulting, *Machine Learning Intern* Zurich, Switzerland, Fall 2018

- Developed a novel labeling technique and built a practical machine learning pipeline consisting of optical character recognition, label parsing, TF-IDF, principal component analysis and a neural network classifier.
- Produced a summary of my research in a paper entitled, "Deep Learning for Data Privacy Classification," in partial fulfillment of undergraduate degree requirements.

Wayfair, *Software Engineering Intern - Ad Tech and Customer Intelligence* Boston, Massachusetts, Summer 2018

- *Push Notification Personalization:* Designed and implemented a backwards compatible way to integrate personalization into push notifications for the Wayfair app.
- This improved the user experience and click through rate for more than 5 million customers.

Datto, *Software Engineering Intern* Boston, Massachusetts,Summer 2017

- Implemented a context-free parser for Datto's query language compiler. Wrote a macro preprocessor to interpret the resulting syntax tree and expand macro tokens based on semantic context.
- Built a database analysis tool which produces a documentation website running on the Symfony framework. Implemented a parallel algorithm, reducing sampling times from 12 hours to 10 minutes.

PROJECTS

Unsupervised Semantic Segmentation through Adversarial Learning, Master's Thesis August 2019 - May 2020

- Ongoing research exploring object recognition and clustering through unsupervised generative models.

Deep Autoencoder Latent Space Visualization, Personal Project March 2019

- Used Tensorflow to train an autoencoder to project MNIST handwritten digits from 784-dimensional space to 2 dimensions and back in real time, creating an interactive visualization of the learned 2-dimensional latent space. github.com/gr-b/autoencoder-latent-space-visualization

Functional Programming Language Interpreter, Personal Project January 2018

- Wrote an interpreter for a language with closures, type inference, local variables, mutation, references, and objects.

Line Art Genetic Algorithm, Personal Project May 2017

- Created a genetic algorithm that draws approximations of photographs using only a set of line segments.

EXTRA CURRICULAR EXPERIENCE

Beta Theta Pi, *Finance Chairman***,** WPI December 2016 - Present
Men's Varsity Crew Team, (*NERC Gold Medalist, May 2017)*, WPI September 2016 - Present

AWARDS: Upsilon Pi Epsilon Honor Society | Men of Principle Award | Dean's List | TA Achievement Award