Bharat Srirangam

US Citizen • (317)902–7190 • bharatsrirangam@gatech.edu • Personal Website/Github: bharatsrirangam.github.io

Education

GEORGIA INSTITUTE OF TECHNOLOGY   **Atlanta, GA**
Bachelor of Science in Computer Science   *May 2020*
- **Threads**: Intelligence, Theory   **GPA: 3.97/4.0**

Relevant Coursework: Data Structures • Honors Advanced Algorithms (1 & 2) • (Graduate) Computer Vision • Systems and Networks • Advanced Linear Algebra • Probability/Statistics • Machine Learning • Graph Theory • Natural Language

Experience

Woot.com Inc. - an Amazon Company   **Seattle, WA**
Software Development (Intern | Full Time) – Core Technologies   *May 2019 – August 2019 | May 2020 - Present*
I built a service for the marketing team to create benefits for customers based on different provided qualification metrics so that special deals could be sent to and applied to any registered customer through email or at checkout on Woot.com.
- Created automated benefits that could provide savings for potentially every customer of Woot (~ 9 million customers)
- Developed an automated End to End Serverless benefits service with Native AWS technologies in a .Net environment
- Designed/Implemented RestfulAPI endpoints in legacy systems/New Services that provide a foundation for future work
- Acquired strong technical communication skills and a business acumen from weekly design reviews and retrospectives

Amazon.com Inc.   **Seattle, WA**
Software Development Engineering Intern – Big Data Technologies (BDT)   *May 2018 – August 2018*
I built an application for an internal service that sets preferences on website searches - Providing the groundwork for future feature development in the next 5 years, Reducing search latency, and Augmenting the user experience on the website.
- Created an End to End Serverless solution with Native AWS to reduce the search time for users of an internal service
- Implemented a RestfulApi service w/ data analysis features - complete with JUnits/documentation to allow for future work
- Analyzed API request logs with the Hierarchal Clustering/OPTICS clustering algorithms to predict user behavior
- Developed strong communication skills from daily SCRUM meetings with my mentor/manager and demos with my team

Georgia Tech Healthcare Robotics Lab (Institute for Robotics and Intelligent Machines)   **Atlanta, GA**
Machine Learning Research Assistant   *December 2017 – Present*
Researched the potential benefits of Generative Adversarial Neural Networks(GANs) as well as object segmentation with the intent to manipulate and measure aspects of different objects.
- Researching a way to develop complete training data sets for supervised deep learning algorithms through GANs
- Experimenting on how semi-supervised vs pure supervised learning affects GAN's generative/discriminative networks
- Published a paper, "Multimodal Material Classification for Robots Using Spectroscopy and High Resolution Texture Imaging", at the International Conference on Intelligent Robots and Systems (IROS) Conference

GT College of Computing: *Computer Organization and Programming (CS2110) Teaching Assistant*   **Atlanta, GA**
I was a teaching assistant and Quiz Master for CS2110 (200+ students). My tasks include: *August 2018 – January 2020*
- Leading/Preparing recitations, Creating/Grading Quizzes and homework assignments, and Conducting office hours

Skills

Computer: (Languages) Proficient: Java, C, Python | **Medium:** C#, SQL, HTML, Matlab | **Knowledgeable:** C++, JavaScript
Developer Tools: Native AWS Suite, Git, JUnit/Mockito, .Net, Tensorflow/Keras, Json/GSON, Pandas, SciPy, RestApis
College Activities: Tech the Halls (Volunteering) | Bits of Good | The Makery | Georgia Tech Crew Club (Rowing)

Class Projects/Hackathons/Extracurricular Projects

[Hackathon Project] HackGT5: LocationScores   *October 2018*
LocationScores is a consulting application that won 1st place for the "Best Use of ESRI's API" at GT's 5th Hackathon.
- Correlated wealth distribution, employment rate, etc. with existing store performances to find new optimal store locations
- Developed using Python, Tensorflow, Keras and Pythons Requests library for efficient data collection and analysis
- Created and Trained an original neural network model to predict the performance of a store based on demographic data

[Personal Project] FBMessengerEngine: Local Application   *August 2019 - Present*
This Facebook Messenger Engine, Insight, does basic analytics on the chats of your Facebook account. If you've ever struggled to gather specific information on your chats, now that process is made easier with my application.
- Analyzes FB chat history to get information such as message count, conversation count, and specific mentions
- Conducted NLP Topic Analysis on conversations to create topic lists using Libraries such as gensim and nltk
- Constructed algorithms for analysis and an application that scales to include those algorithms as they are created