GIRISH BALAJI

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Experience

MICROSOFT | SOFTWARE ENGINEER INTERN
MAY 2018 – AUG 2018

- Developed C#/ASP.NET app to search OS architecture composition
- Implemented graph visualization features to navigate package dependencies and determine potential package collisions
- Designed caching scheme and NLP free-text search features for enhanced UX

INTUIT | SOFTWARE ENGINEER INTERN
MAY 2017 – AUG 2017

- Designed and implemented new sign in policy for customer service tool with multi-factor authentication (MFA) and single sign on (SSO)
- **6000+** secure accesses logged daily through new sign in experience
- Enhanced unit and integration testing suite with Protractor

KAISER PERMANENTE | DEVOPS INTERN
MAY 2016 – AUG 2016

- Developed security certificate compliance verification program for web hosts in a server environment with parallelized Python scripts
- Automated setup of server configurations (Artifactory, Gestió IPAM, BIND DNS) deployed to support new cloud production node

Research

BERKELEY DEEP DRIVE | UNDERGRADUATE RESEARCHER
AUG 2017 – CURRENT

- Creating image learning dataset with safe web crawling infrastructure
- Developing new active learning techniques for efficient and accurate large scale visual object classification with our own data pipeline

ANTHOFF LAB | RESEARCH DEVELOPER
AUG 2016 – MAY 2017

- Augmented climate cost modeling libraries used by White House EPA
- Developed graph visualization features for complex models in Julia

Projects

TURTLEBOT FOLLOWER – FALL 2017 | ROS, NumPy, SciPy

- Developed online computer vision tracking algorithms for robot to locate red target and human faces in kinect input stream
- Implemented PID controller for Turtlebot to follow a target real-time

VOICE ID RECOGNITION – SPRING 2016 | NumPy, SciPy

- Signal processing (MFCC filtering) to extract recognition features
- Vector quantization (SciPy) to classify test voices—~90% accuracy

NBA 2015 PLAYER ANALYTICS – FALL 2016 | R, R libraries (i.e.dplyr)

- Analyzed player data with PCA to rank player effectiveness by position
- Scraped, cleaned, and analyzed data from NBA site to create report

Education

University of California, Berkeley
B.S. Electrical Engineering and Computer Science (EECS)
May 2019 | GPA: 3.88

Skills

Languages
Python, Java, R, JavaScript, Julia, C, SQL, HTML/ CSS,

Frameworks/ Tools
NumPy, SciPy, Node.js, Angular.JS, Protractor,

DevOps Tools
Ansible, Vagrant

Courses

- Machine Learning,
- Operating Systems;
- Artificial Intelligence;
- Probability Theory & Random Processes
- Robotics;
- Signals and Systems;
- Computer Architecture;
- Efficient Algorithms & Intractable Problems;
- Computing with Data;
- Data Structures;
- Introduction to EE I & II;
- Discrete Math

Awards

EECS Honor Society – Eta Kappa Nu | Industrial Relations Officer (Fall 2017)

Eagle Scout | Boy Scouts of America

UC Berkeley Honors to Date