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// education

University of California, Irvine

Udacity

Computer Science and Engineering, B.Sc. 3.50 GPA

Machine Learning Nanodegree, In Progress

// skill set & interests

full stack engineer

python, reactjs, docker, rancher, gocd, sql, nosql, aws

generalist

microservices, restful api design, embedded, linux, java, c/c++

aspiring machine learning engineer

anaconda, scikit-learn, caffe, tensorflow, pachyderm

hobbies

board games, binging shows, cycling, hiking, travelling, volunteering

// experience

Software Engineer – Machine Learning

June 2017 - present

Johnson Controls – Advanced Research Group

Santa Clara, CA

- Refactored our research scientists' deep learning network code by implementing object abstractions that improves the readability and maintainability of the code base for long term support.
- Deployed Pachyderm and developed data pipelines to process data across a distributed cluster of CPU and GPU machines and automate training our deep learning models.
- Headed the deployment of our cloud infrastructure that includes GitLab, Rancher, and GoCD, on AWS increasing efficiency and productivity across our research and engineering teams.
- Provided miscellaneous support across our software projects wherever needed including integrating our inference and detection engine on a NVIDIA Jetson TX1 devkit with a camera calculating and drawing inference video annotations in real time using multiprocessing and threading libraries to achieve fluidity.
- Designed a frontend portal to our research demos and infrastructure using ReactJS while augmenting popular libraries such as react-router to programmatically set up and tear down custom views.

Software Engineer – Cloud

June 2016 – June 2017

Tyco International – Tyco On Development Operations

Irvine, CA

- Utilized Amazon Web Services for our IoT cloud platform deployment, using Puppet for server configuration, Nginx for load balancing, and Rancher for docker orchestration.
- Architected a RESTful application using Flask to manage and monitor our platform actioning on system and application metrics.
- Implemented an authentication and authorization system using JSON web tokens for the RESTful application that allows our internal teams to manage across multiple projects in a stateless manner.
- Developed a frontend application using ReactJS to interface with the prior mentioned RESTful application.
- Deployed the front and backend application using AWS, Rancher, Consul for service discovery, and Vault for secrets handling.

Software Engineering Co-op – Tools

June 2015 – September 2015

Rockwell Collins-ARINC – Advanced Information Management Platform

Marina del Rey, CA

- Contributed to our popular train control software tool debugging issues pertaining to operator permissions and automatic failover issues, developed tools to support development, and wrote platform operation documentation.

// research

Proximity Detection for Autism Research, Advisers: LouAnne Boyd and Dr. Gillian Hayes

September 2015 – March 2016

Social and Technological Action Research (STAR) Group

Irvine, CA

- Researched potential autism therapy methods to determine common conversation patterns using a system of connected devices and sensors to provide real-time feedback and data collection.
- Developed an iOS application using Swift and a client-server application using Python to collect proximity and orientation data.
- Received Dean's Choice at Senior Design Review for our project design and goals.

STILL LEARNING. ALWAYS LEARNING.
REFERENCES ARE AVAILABLE UPON REQUEST