Ashwin Jose Poruthukaran

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SUMMARY

MS graduate with 2+ years of software engineering experience, open to Software developer roles starting June 2020

EDUCATION

MCS, Master of Computer Science (Arizona State University, Tempe, AZ, USA)   3.73/4.00 GPA   May 2020
B.Tech, Computer Science (Cochin University of Science & Technology, Kerala, India)   8.57/10.00 GPA   May 2016

TECHNICAL SKILLS

Programming: Java, Python, C++, ABAP, SQL, Bash, HTML5, JavaScript, CSS, AJAX
Libraries & Frameworks: Spring, REST API, Junit, Hibernate, JDBC, Docker, Django, Pandas, Scipy, Numpy, TensorFlow, ReactJS, ExpressJS, NodeJS.
Cloud Platforms: AWS S3, AWS EC2, AWS SQS, GCP App Engine, GCP Compute Engine.
Databases & Big Data: Hadoop, Spark, MySQL, SQLite, MongoDB, Postgres.
Other: SAP ECC, MATLAB, Microsoft Office Suite, Adobe Creative Suite.

STUDENT TECHNICAL EXPERIENCE

Research Aide, Ira A Fulton Schools of Engineering, ASU (3 months)   February 2020 – May 2020

- Developed web-based, generic, annotation to ML inference pipelines using Python, Django, Docker, Computer Vision and Deep Learning to further research in multiple domains including lunar surface analysis, Mars surface analysis etc.
- Developed docker-based containerized robotic simulation environments using ROS, Gazebo, Python and Shell scripting to facilitate programming and simulations for robotics scenarios (OpenUAV).

PROFESSIONAL EXPERIENCE

BTA – Software Developer, Deloitte USI, Bengaluru, India (2 Years)   August 2016 – July 2018

- As an SAP ERP stack-based software developer, I developed and optimized custom solutions using ABAP and SQL on SAP ECC 4.6+ and served as primary developer for modules including SD, MM and FICO for North American clients.
- Worked extensively on relational databases, using SQL to design databases, perform and optimize CRUD operations.
- Developed an incident tracking system over Microsoft SharePoint saving 4 hours per team-member, weekly.
- Leveraged shell scripting to automate file migration from traditional data storage systems to SharePoint

iOS Developer – Intern, QBurst Technologies, Kochi, India (6 weeks)   May 2015 – June 2015

- Developed an Apple Watch application to improve productivity by tracking the user's physical activity and vitals.
- Developed an iOS mobile application to work alongside the Apple Watch app and provide real-time statistics.

TECHNICAL PROJECTS

Patent Similarity Dashboard

- Developed an interactive web-dashboard with a RESTful Spring backend that populates visualizations based on the results of topic modelling and natural language processing algorithms like LDA, Tfidf and Word vector embeddings.
- Technology: Java, Spring Boot, Junit, MySQL, JavaScript, HTML, CSS, Ajax, JQuery, Tensorflow.

Driving Companion – Sleep detection from heartrate using Machine Learning

- Developed an Android app that continuously monitors heartrate using Fitbit devices and detects drowsiness while driving using a combination of ML models like KNN, LR and SVM.
- Technology: Android, Java, Fitbit SDK, Google Maps SDK, Python, Pandas, Scipy, Flask

Drone recovery using UAV

- Developed a python-based application to allow a UAV to autonomously search through a terrain, identify objects and assist in the recovery of previously lost drones.
- Technology: Python, ROS, OpenCV, Gazebo, Multi-UAV Control, FLANN.

Traffic flow prediction with ML

- Developed an application with under 16% RMSE to predict traffic flow based on temporal, spatial and other external features like weather conditions using ExtraTreesRegressor model.
- Technology: Python, Scipy, Numpy, Pandas, Scikit-learn

ACHIEVEMENTS

Winner, InfernoHack 2018, WP Carey School of Business, for developing an Alexa Skill and Google Home voice application to allow easy processing of online repeat orders while providing customer insights for the organization at the same time.