# Ashwin Jose Poruthukaran

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#### **SUMMARY**

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

React | S, Express | S, Node | S.

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**

## Business Technology Analyst, Deloitte USI, Bengaluru, India (2 Years)

August 2016 – July 2018

- Developed and optimized SAP ERP solutions using ABAP on SAP ECC 4.6+ across various SAP ERP modules including SD, MM, FICO, HRM. Worked extensively on relational databases, using SQL and ABAP to 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**

First Prize, 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.