# Joshua P. Olson

1777 Ala Moana Blvd #635 Honolulu, HI 96815 314-495-6933

Email: JoshuaOlson101@gmail.com

#### **EXECUTIVE SUMMARY**

Master's in Computer Science seeking Software Engineering role. Team leader accomplished in Big Data databases and analysis, Machine Learning, IOS and Android mobile development, full-stack web development, and blockchain smart contract development. Led remote teams to successfully deliver ahead of schedule. Innovative and motivated, founded a team to develop solutions to improve learning efficiency and aid those with learning challenges. Lead team to a prof of concept react native mobile app. Over 5 years of experience at a Fortune Top 10 company including Project Technical Lead on projects saving \$1M/yr at \$0 investment and \$80M international capital expansion project. This demonstrated unique leadership skills and ability to solve large scale complex problems by coordinating new technology research, capital expansion, and cost savings.

## **EDUCATION**

Arizona State University Masters in Computer Science (2020 - Graduation July 2022)

GPA: 3.67

Experience with Data Processing at Scale, Software Development, Design, and Testing, Machine Learning, Information Security, Mobile Computing, and Blockchain Development

University of Houston Computer Science Graduate Prerequisites (2019-2020)

GPA: 4.0/4.0

AUBURN UNIVERSITY - AUBURN, AL (2013)
Bachelor of Chemical Engineering
GPA 3.60 (Magna Cum Laude)

UNC Kenan-Flagler Business School Executive Development Certificate (2018)

#### **SKILLS**

- Programming Languages: Java, C++, Python, JavaScript, Kotlin, Scala, IOS Swift, SQL, MATLAB, PI Process Book
- Full-Stack JavaScript Development: MongoDB, Node, and React, mobile application development, database development, Data statistical analysis, CNN training, Computer Vision, cryptography, information security, blockchain
- Team leadership: project lead on remote teams implemented cloud collaboration tools, version control, and managed team member deliverables to deliver ahead of schedule. Resulting in speed to market and reduced costs.
- Technology project lead: opportunistically identified cost reduction opportunities both at \$0 investment cost and those with ROI greater than 100%. Projects included developing new technologies and \$80M+ facilities installations internationally.

### **EXPERIENCE**

Project Experience - Arizona State University MS in CS

- Data Processing at Scale SQL database development and analysis.
  - SparkSQL was used to develop custom queries to process, manipulate, and draw conclusions from sets of spatial data.
- Data Processing at Scale spatial statistics to identify statistically significant clusters in a "Big Data" set of NYC Taxi Trips.

- These projects provided learning in processing large data sets, statistical analysis, and underlying technology implementations of SQL Databases, Apache Spark, and Scala programing language.
- Android application development using Kotlin and Java programming languages.
  - Convolutional Neural Networks (CNN's) were trained. Technologies utilized were Python, OpenCV (Computer Vision), TensorFlow, and Keras.
  - Mobile Application accessed smartphone camera and utilized the trained CNN to convert hand gestures into instructions for Smart Home Thermostat control.
- iPhone mobile application developed using IOS Swift and XCODE.
  - Development included User interface, multiple screens with dynamic screen navigation, user data collection and responses to user input.
- Blockchain network and smart contract development and deployment.
  - Hyperledger fabric network deployed and smart contracts were developed for use in supply chain management of assets of a home appliance company.
  - Hyperledger fabric network is a blockchain technology designed for enterprise use.
- Blockchain Dash transactions created and sent between two addresses using Dash test network blockchain.
  - o Provided learnings in the areas of public blockchain ecosystems including examining, writing, and executing financial transactions with the Dash public blockchain.

## Software Development - MindMap AI (2018-2020)

- Recruited, built, and managed team of top engineers, MBA's, and designers.
- Mission was to leverage machine learning to identify user's learning style, facilitate unintrusive note taking
  by building interactive 3D "learning paths", and allow users to share their learning journey "learning
  paths" with others having similar learning styles.
- Utilized React Native to build iOS and Android beta prototype capable of displaying interactive 3D learning paths with nodes containing notes, videos, websites, etc.
- Built an Ethereum based cryptocurrency to facilitate transactions on the platform.

## EXXONMOBIL CHEMICAL COMPANY - Baytown, TX

Process Technology Chemical Engineer (July 2016 to June 2019)

- Provide technical engineering support to global network of Gas Phase Metallocene Polyethylene Reactors.
- Engineering support for manufacturing units, technology lead on projects implementing new catalyst technologies and \$80M+ facility installations.
- Inventor on the following filed patents: 62/754217 in-line trimming of dry-catalyst feed; 62/754224 online adjustment of mixed catalyst ratio and olefin polymerization; 62/754231 online adjustment of catalyst ratio and olefin polymerization with the same; 62/754241 online adjustment of catalyst by trim and olefin polymerization; 62/754248 slurry trim feeder modifications

### EXXONMOBIL CHEMICAL COMPANY - Mont Belvieu, TX

Process Engineer Metallocene Catalyst Manufacturing Unit (June 2013 to July 2016)

- Responsible for unit troubleshooting, quality, cost reduction projects, and emissions improvement projects.
- Led multiple quality investigations and capital improvement projects from inception to completion achieving annual savings of \$1 million.

## **ACHIEVEMENTS AND SERVICE**

- ASU Online Masters Computer Science Honor Roll
- UNC Kenan-Flagler Business School Executive Development Certificate
- Selected and admitted into Tao Beta Pi Engineering Honor Society
- Eagle Scout