Clyde James Felix

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Education

UNIVERSITY OF HAWAII AT MANOA College of Engineering **Aug 2020 - Aug 2021**
M.S. in Electrical and Computer Engineering (Systems and Data Science)

UNIVERSITY OF HAWAII AT MANOA College of Engineering **Aug 2016 - May 2020**
B.S. in Electrical Engineering

      Leadership: IEEE Student Hawai'i Branch (**Webmaster**), Engineers' Council at UH (**VP of Information Technology**)

Work Experiences

SOFTWARE ENGINEER
DataHouse Consulting, Inc. **Jun 2021 - Present**
- Spearheaded the development of 3 **AWS**-based applications as Backend Lead and Tech Lead using **JavaScript**/**TypeScript**, and **Python**, ensuring secure, scalable, and highly available in development and production workloads.
- Maintained a high level of professional communication, facilitating seamless interactions with project managers, clients, business analysts, and fellow developers, ultimately fostering a collaborative environment that enhanced project quality and client satisfaction.
- Utilized Jira to track and prioritize software development tasks while adhering to Agile methodologies.

TEACHING ASSISTANT
UH Manoa Department of Electrical Engineering **Jan 2020 - Dec 2021**
- Assisted around 10-30 undergraduate students in conducting experiments using **Python** and **MATLAB**.
- Courses: *Linear Algebra/Machine Learning*(EE 345), *Communication System*(EE 343), *Microelectronic Circuits I*(EE 323), *Digital Signal Processing*(EE 415).

GRADUATE RESEARCH ASSISTANT
UH Manoa Department of Electrical Engineering **Jul 2020 - Feb 2021**
- Conducted independent research on Medical Imaging using Deep Learning and Computer Vision.
- Developed an *iterative* Neural Network to improve model performance of the MRI image reconstruction using **Linux**, **Matlab**, and **Pytorch**.

SOFTWARE ENGINEER INTERN
Alohapay, Inc. **Mar 2020 - May 2020**
- Developed **Python** test scripts utilizing **Selenium** to evaluate the performance of the AlohaPass mobile application.
- Generated and revised documentation related to the application, as well as reports detailing testing outcomes.

UNDERGRADUATE RESEARCH ASSISTANT
UH Manoa Department of Mathematics **Jun 2019 - Aug 2019**
- Collaborated with 3 students on providing mathematical simulations on automatic complexities of Fibonacci/Tribonacci words and VC-dimensions using **Python** and **Jupyter Notebook**.
- Contributed to an accepted ISAIM publication and Undergraduate Research Program presentation.

MACHINE LEARNING RESEARCH INTERN
Tokyo University of Agriculture & Technology **Jul 2019 - Aug 2019**
- Designed a **MATLAB** code of a Brain-Computer Interface system that classifies the mental states of an individual.
- Successfully determined a Motor Imagery setting that benefits stroke rehabilitation around 5% increase in accuracy.

Technical Skills

Languages: Python, MATLAB, Javascript, Typescript, HTML/CSS
Tools: Jira/Confluence, Git(Github/Gitlab), Linux, DBeaver, Visual Studio Code, Figma, Postman
Frameworks/Libraries: Node, Deno, Express, React, React Native, Angular
Machine Learning: Pytorch, Tensorflow, Scikit-learn, Pandas, Numpy, Jupyter
Database: SQL(MSSQL,Postgresql), MongoDB
Cloud Computing Platform: Amazon Web Services (AWS), Google Cloud Platform (GCP)

Projects

Federated Learning using Online-Kernel Methods
- Simulated Online Federated Learning using iterative least-squares algorithms, and kernel methods using **Python**.
- Wrote an accepted publication on Personalized Learning using kernel approximations on Random Fourier Features.

Reinforcement Learning on an Asymmetric Strategic game
- Led 5-10 undergraduate students in developing a strategy board game *Goats & Tigers* using **Python**.
- Implemented Reinforcement Learning to research computer behavior using **Keras**/**Tensorflow**, and **Jupyter**.

Workspace Hoteling application
- Developed a mobile-responsive workspace reservation web application utilizing the MERN stack (**MongoDB**, **Express**, **React**, **Node**).

- Leveraged **AWS** services such as EC2, RDS, Cognito, ECS, and CloudFront to deploy web applications for production use.