CLYDE JAMES FELIX

Honolulu, HI, 96818 | (808) 546-9976 | felixclyde@gmail.com | www.linkedin.com/in/felixclyde | cjfelixx.github.io

Detail-oriented Electrical Engineering student in a university with expertise in engineering, computer programming, leading & teaching, problem-solving, and research & development. Seeking to leverage my knowledge and expertise in engineering, coding, research & development, and theories & applications in concepts including Signal & Image processing, Computer Vision, Data Science, Machine Learning, and Neural Networks to help you with your upcoming projects.

EDUCATION

UNIVERSITY OF HAWAI' I AT MANOA | Bachelor of Science in Electrical Engineering | **August/2016-May/2020**

CORE COMPETENCIES

Engineering, Electrical Design, Product Design & Development, Data Collection & Statistical Analysis, Research Methodology, Computer Programming & Competency, Conceptual Thinking, Team Leadership

Applications : Linux/Unix, Git, Python, Matlab/Simulink, C/C++, PCB CAD, HTML/CSS, LaTeX

WORK EXPERIENCES

UNDERGRADUATE TEACHING ASSISTANT

UH Manoa Department of Electrical Engineering **January/2020-Present**

- Served as a Teaching Assistant for Linear Algebra & Machine Learning course for 10+ engineering students.
- Taught/led students on understanding the course concepts theoretically and by Python programming.

RESEARCH ASSISTANT

UH Manoa Department of Physics & Astronomy **May/2019-Present**

- Assisted the study of developing an efficient elementary particle detector by conducting research practices.
- Created an easy-to-access Python program that analyzes voltage waveforms due to elementary particles. Conceptualized a machine learning model that determines the position of a detection.

UNDERGRADUATE RESEARCH ASSISTANT

UH Manoa Department of Mathematics **June/2019 - August/2019**

- Collaborated with undergraduate students to examine the lower bounds of automatic complexities, the shattering of VC-dimensions, and the Fibonacci/Tribonacci sequences.
- Co-wrote an ISAIM conference paper and presentations for the theoretical findings.

ACADEMIC PROJECTS

BIG DATA LAB

Advisor: Dr. Narayana Prasad Santhanam **January/2020-Present**

- Investigated Deep Learning fundamentals through linear algebra, statistics, and Python programming.
- Able to implement machine learning algorithms using Keras and the Anaconda platform.

TOKYO UNIVERSITY OF AGRICULTURE & TECHNOLOGY

Advisor: Dr. Toshihasa Tanaka **July/2019-August/2019**

- Developed a Brain-Computer Interface Machine Learning model using MATLAB to classify brain wave-forms whether the user is at rest or in Motor Imagery task. Co-wrote a publication with professors for an ICASSP conference.
- Successfully determined a better Motor Imagery setting that will benefit stroke rehabilitation studies.

SMART CAMPUS ENERGY LAB

Advisor: Dr. Anthony Kuh **January/2018-December/2018**

- Engineered a cost-effective weather data collection device using PCB CAD designing and C++ and other Electrical engineering tasks.
- Notable for launching the device at the UH Manoa campus that wirelessly sends data onto a computer server.

EXTRACURRICULAR ACTIVITIES

IEEE Student Hawai'i Branch, Engineer's Council at the University of Hawai'i, Hawai'i Annual Code Challenge 2019 Hackathon, Mind Innovation and Design 2019 competition.

PUBLICATIONS

R. Islam, C. Felix, T. Tanaka. *Enhancement and Detection of Event-Related Desynchronization in EEG Signals based on Action Observations*. Submitted for ICASSP 2020.

B.K. Hanssen, C. Felix, S.Y. Kim, E. Lamb, and D. Takahashi (2020).*Vapnik-Chervonenkis-dimensions of non-deterministic finite Automata for words of equal length*. ISAIM 2020. <https://arxiv.org/pdf/2001.02309v1.pdf>

B.K. Hanssen, C. Felix, S.Y. Kim, E. Lamb, and D. Takahashi. *Automatic Complexity of Fibonacci and Tribonacci words*. Unpublished.

AWARDS & ACHIEVEMENTS

2016, 2019 Dean's list
2016-2020, Hawai'i B Plus Scholarship
2018, Fred and Annie Chan Scholarship Fund for Electrical Engineering
2019, Ronald N. S. Ho and Ann T. Ho Scholarship Endowment in Electrical Engineering