

Paul Kawika McCabe

EDUCATION

- Case Western Reserve University – Case School of Engineering**, Cleveland, OH *August 2017 – May 2022*
B. S. E. in Electrical Engineering (In Progress) with Secondary Major in Philosophy and Minor in Data Science
- Cumulative GPA: 3.83/4.0, Junior Senior Scholarship, Baker-Nord Center for the Humanities Scholar
- DIS Copenhagen – Philosophy Program**, Copenhagen, Denmark *January 2020 – May 2020*
- Relevant Coursework: Computational Analysis of Big Data, Artificial Intelligence, Danish Language and Culture

WORK EXPERIENCE

- Data Science Intern** *Queen's Medical Center*, Honolulu HI *September 2020 – present*
- Created and documented a pipeline for patient bed alarm data using Python. Raw csv files were cleaned, standardized, and stored in a PostgreSQL database for easier access and higher scalability.
 - Designed an intuitive and accessible data dashboard using Dash to view bed alarm statistics for individual departments.
- Computational Diagnostics Researcher** *Madabushi Lab (CCIPD)*, Cleveland OH *May 2019 – September 2019*
- Developed an algorithm that uses CT scans to model the airway, bronchioles, and cancerous growths separately in 3D.
 - These models can be used to predict diagnostics such as malignant vs benign tumors and prevent unnecessary cancer treatments, recognize tumors early, and model the growth rate of tumors.
- Engineering Technician Intern** *Subaru Telescope, Akamai Workforce Initiative*, Hilo HI *June 2018 – August 2018*
- Designed wiring diagrams and setup documentation of a coolant monitoring system for the National Astronomical Observatory of Japan, specifically a 50-million-dollar instrument known as the Prime Focus Spectrograph.
 - Installed 23 coolant modules at the summit, ensuring instrument functionality and measurement accuracy. Spectrograph data collected will advance our current understanding of Dark Matter and Dark Energy in the universe.
- Research Assistant, xLab** *Weatherhead School of Business*, Cleveland OH *August 2019 – May 2020*
- Served as the undergraduate representative for xLab, a new on-campus initiative that provides digital innovation solutions for large legacy companies through teams of undergraduate and graduate students.
 - Produced marketing material and assisted with events such as quarterly meetings and the Digital Futures Conference.

CODING PROJECTS

- GitHub:** <https://github.com/paulmtree>
- Analyzed sentiment and generated random sentences from a philosophy book by Søren Kierkegaard. *August 2020*
 - Collected, cleaned, and analyzed U.S. Senator stock trading data to identify suspicious/outlier behavior. *May 2020*
 - Used CT scans of the lungs to separate and model various body parts to be used in predictive diagnostics. *May 2019*

ACTIVITIES AND AWARDS

- Design for America: Co-Director of Projects and Programming** Cleveland OH *August 2017 – December 2019*
Workshop Coordinator: Fall '19 | Co-Director: Spring '19 | Team Lead: Spring '18, Fall '18 | Member: Fall '17
- Co-Director: Created and directed weekly studio meetings of ~40 members while teaching the design process using social group activities. Introduced use of social activities to increase meeting attendance and sense of community.
- Consulting Club: Vice President of Internal Affairs** Cleveland OH *December 2018 – December 2019*
VP of Internal Affairs: Fall '19 | Public Relations: Spring '19 | Member: Fall '18
- Increased club attendance by planning and leading 3 interview workshops, 6 graphically appealing posters, and by recruiting 7 professional consultants to speak at interview prep workshops. (~30 new members that semester)
- Boy Scouts of America, Eagle Scout** Aiea HI *Sep 2009 – March 2016*
Eagle Scout Project - Painted a 50-foot mural depicting Noah's Ark and cleaned the campus of my previous middle school
- President's Volunteer Service Award** Honolulu HI *April 2016*
Awarded for completing 100 volunteer service hours within one year's time

ADDITIONAL INFORMATION

Computer: Exploratory Data Science in R and Python, Python Image Processing, SQL, Dash, Pandas, Numpy
Interests: Surfing, Mechanical Keyboards, Stock Trading, Weightlifting, Photography, College Radio, Guitar, PC Building