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EDUCATION

UNIVERSITY OF MARYLAND, COLLEGE PARK | BS COMPUTER SCIENCE College Park, Maryland | Aug 2018 - May 2022

GPA: 3.3

| RELEVANT COURSES: ALGORITHMS, ORGANIZATION OF PROGRAMMING LANGUAGES, LINEAR ALGEBRA, AND OPERATING SYSTEMS

WORK EXPERIENCE

NASA GODDARD | SOFTWARE ENGINEER

Greenbelt, MD | Jan 2020 - Aug 2020

- Lead team and pushed for the development of new atmospheric correction software for satellite imagery, improved efficiency and accuracy by 50% and contributed to ARCSI open source project
- Deployed atmospheric correction software on AWS EC2 along with automatic data conversion and reduced noise of data by 30%
- Developed machine learning model using Keras to predict the presence of minerals and compounds based on pixel signature with 90% accuracy

MACH33 ENGINEERING | SOFTWARE ENGINEER

Laurel, MD | May 2019 - Nov 2019

- Supported the development of Laser Heterodyne Radiometer instrument by creating python OPENCV2 based verification tool to determine the validity of sensor position
- Used HTML, CSS, and PHP to developed site which allowed for real time data viewing of sensor and past data

SKILLS

BASIC AWS EC2, Docker, Javascript, HTML, PHP, Matlab, Swift, Machine Learning/Data Science Proficient Python, Java, Git, Github, Linux, OCaml, Ruby, AGILE, Arduino, OpenCV

SELECTED PROJECT

PENNAPPS 2019 | JAVA

Sep 2019

Lead team to develop a budgeting app using Capital One's Nessie API for the android system. Tool automatically categorized transactions and allowed users to implement budgets.

WEB-BASED YOLOV3 | JAVASCRIPT, HTML, PYTHON, TENSORFLOW.JS

June 2020

Converted existing machine learning model YOLOv3 based on darknet into Keras model/TensorFlow JavaScript and developed site which allowed real time webcam object detection.

HOOHACKS 2019 | SWIFT

Mar 2019

Designed and implemented IOS app which allowed users to save their courses and grades and add hypothetical grades. Calculated grade required to achieve/sustain user defined GPA

ECO-VENT | ARDUINO Mar 2020

Supported the development of ECO-Ventilator by writing and refining arduino code for data viewing and motor control

HONORS/ACTIVITIES

UMCP SCHOLARS Aug 2018-Present | SGC scholars

Volunteered and contributed to organizations for environmental awareness

TAIWANESE AMERICAN STUDENT ASSOCIATION TASA

Helped organize event which promoted Taiwanese culture on UMCP campus