

EDUCATION

CARNEGIE MELLON UNIVERSITY (CMU)

BS IN ELECTRICAL AND COMPUTER
ENGINEERING

MINOR IN SOFTWARE ENGINEERING

May 2023 | Pittsburgh, PA

GPA: 4.0 / 4.0

COURSEWORK

- Computer Systems (C / Assembly)
- Data Structures and Algorithms (C)
- Fundamentals of Computer Science (Python)
- Introduction to Electrical and Computer Engineering

SKILLS

LANGUAGES

Java • Python • C • C++

Javascript • Typescript

PHP • SQL • Bash

FRAMEWORKS

NodeJS • Express • ReactJS • Slim

MongoDB • MySQL • Firebase

Android SDK/NDK • Flutter

Git • Linux • Nginx

TensorFlow • OpenCV • Node-RED

HARDWARE

Arduino • Raspberry PI • NodeMCU

PUBLICATIONS

Development of a Mobile Android
Application on Optical Character,
Speech, and Sign Language
Recognition

published in the proceedings of
the 2018 Physics Society of
Visayas and Mindanao National
Conference (Philippines)

HONORS

2019 CMU Engineering Dean's List

2019 8th place at National Olympiad
for Informatics (Philippines)

2018 5th place at National Olympiad
for Physics (Philippines)

EXPERIENCE

CMU HUMAN COMPUTER INTERACTION INSTITUTE

COMPUTER HUMAN INTERACTION: MOBILITY PRIVACY SECURITY GROUP

Research Assistant

May 2020 - Present | Pittsburgh, PA

- Developed an IoT network hub that transforms normal sensors across LAN into a smart home system with a focus on privacy using Node-RED, Node.JS, OpenCV, and TensorFlow

DASHBOARD PHILIPPINES

March 2020 - Present | Philippines

<https://dashboardphilippines.com/>

<https://donations.dashboardphilippines.com/>

- Partnered with the Philippine government to develop a national dashboard centralizing information and relief distribution in the Philippines during COVID-19 pandemic
- Created platform streamlining donation process to hospitals to address the deficiency of medical supplies using MongoDB, Express, React, and Node.JS (Typescript)

SELECTED PROJECTS

NATIONAL AIR QUALITY MONITORING SYSTEM

March 2019 - Present | Philippines

<https://github.com/ph-innovation-network/amihan>

- Designed and created modular air quality monitoring device using Arduino and NodeMCU
- Created backend for collecting this information using PHP (slim) and MySQL

PUBLIC TRANSPORT TRACKING APP

December 2018 | Philippines

<https://github.com/gramliu/Suroy>

- Developed Android app showing locations of public transportation vehicles in the Philippines with Firebase and Google Maps integration
- Awarded in multiple national competitions in the Philippines

ACTIVITIES AND LEADERSHIP

SCOTTYLABS | DIRECTOR OF TECHNOLOGY

August 2019 - Present | Pittsburgh, PA

- Led the Tech Committee with 25 members, working on various projects and APIs for the CMU community
- Developed Course API which gives access to course information using MongoDB, Express, React, and Node.JS (MERN) Stack
- Developing registration system for TartanHacks (CMU's largest Hackathon) using MERN Stack

SOCIETY OF ASIAN SCIENTISTS AND ENGINEERS

EVENTS COORDINATOR

August 2019 - Present | Pittsburgh, PA

- Organized professional and cultural events for club with 10-15 active members to enrich student experience and pride in Asian heritage