Achilles Dabrowski

Greater NYC Area
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EDUCATION

Duke University, Durham, NC   GPA: 3.63/4.00   May 2022

- *Major:* B.S. in Computer Science and Electrical and Computer Engineering (ECE)
- *Relevant Coursework*: MATH216: Linear Algebra; ECE230: Microelectronic Circuits & Devices; ECE280: Intro to Signals and Systems; ECE250: Computer Architecture; COMPSCI308: Advanced Software Design & Implementation; MATH238: Data Analysis and Decision Sciences; COMPSCI310: Intro to Operating Systems; ECE590: Human-Centered Computing (Graduate-level); ECE270: Fields and Waves

WORK EXPERIENCE

CACI, *Computer Science/Electrical Engineering Intern,* CACI International, Inc.   May 2020 – Aug. 2020

- Developed a web application, Weaver, that provides a simple user interface for building complex private networks that obfuscate traffic using VPNs
- Product will connect various virtual machines served by cloud platforms such as GCP, AWS, and Azure
- Leveraged a Go web server to populate Go templates that are served to the client
- Nodes can be dragged and dropped into the canvas with JointJS to easily visualize the network and configure it

Con Edison Clean Energy Businesses, *IT Summer Intern,* Con Edison, Inc.   Jun. 2019 – Aug. 2019

- Created a new Ethics & Compliance Intranet site with the input of the COO
- Embedded my own custom OSIsoft PI solar and wind asset monitoring displays on two Intranet sites
- Proposed solutions to the CEO's Intranet site action items to enhance the site experience

PROJECT EXPERIENCE

UAS Software Control Interface, *Independent Study (Collaborative);* Python, Olympe, Sphinx, Gazebo   Aug. 2020 – present

- Controls Parrot ANAFI at a distance with first-person view (FPV) as part of the Rainforest XPRIZE competition
- Arcade-style controls limit the motion of the drone to the direction that its camera is facing along with turns

GuideDog, *Hackathon (Collaborative) - HackDuke 2020;* Python, OpenCV, YoloV3, GTTS   Dec. 2020

- AI-based narration camera for the visually impaired that uses the pre-trained image recognition model, YoloV3w
- Google's text-to-speech surface is used to narrate the objects identified by the camera
- Awarded Best Inequality Track Hack as well as the Wolfram Award at HackDuke 2020

EASEPAPR, *Personal (Collaborative);* Fusion 360, Markdown   Mar. 2020 – May 2020

- Designed and currently improving an open-source Powered Air Purifying Respirator (PAPR) device that may be used as PPE in the event that other forms of conventional PPE are unavailable
- Constructed largely using off-the-shelf consumer components that focus on the powered filtration unit

Gyft, *Hackathon (Collaborative) – Hack the Northeast 2020;* Flutter, Dart, Firebase   Jun. 2020

- Android and iOS app that allows businesses to start selling online gift card/certificates for their business
- Designed backend using Dart with Flutter, which also included connecting to Firebase database to store credentials and populate participating business list in the app using information stored in database

LEADERSHIP EXPERIENCE

Duke Academy of Model Aeronautics (AMA), *President Elect*, Duke University   Mar. 2020 - present

- AMA aims to make unmanned aerial systems (UAS) more accessible to students on campus from a myriad of technical and academic backgrounds via enrichment activities and participation in AUVSI-SUAS

SKILLS

Languages: Java, C++, C, Go, JavaScript, HTML, CSS, Python, Dart, MATLAB, MIPS, Markdown

Technologies: Git, Linux, Terminal, Google Cloud, BigQuery, Microsoft Azure, Figma (UI design), MIPS, MATLAB, Arduino, Fusion 360, car audio, car infotainment