

Sander Schulhoff

sanderschulhoff@gmail.com | trigaten.github.io | 410-805-2290

EDUCATION

University of Maryland, College Park

Bachelor of Science in Computer Science

Fall 2020 - Present

GPA: 3.753

RESEARCH

Andreou Lab

Summer 2021

Johns Hopkins University, Professor Andreas G. Andreou

- Built [data pipelines](#) to record data from Arduino chips and RealSense cameras and send it to Microsoft \Psi
- Implemented a CNN+GRU model from scratch with Pytorch for video classification on event camera data.

Undergraduate Research

Fall 2020 – Summer 2021

University of Maryland, Professor Jordan Boyd-Graber

College Park, MD

- Worked on [Diplomacy](#) boardgame NLP project developing a Discord bot used to collect player data and display machine learning predictions
- Bot passed live Alpha and Beta tests with paid participants
- Developed a [simple full-stack website](#) to collect data for a NLP analogy project
- Built an [annotation workflow](#) for the UMD [QANTA](#) project.

Neurodata Lab Summer Internship

Summer 2019

Johns Hopkins University, Professor Joshua Vogelstein

Baltimore, MD

- Wrote unit tests for a project converting clustering algorithm libraries written in R to Python
- Wrote scripts to create presentational graphs of algorithm performance on data sets like Iris
- Performed investigations on different clustering metrics where ground truth is known based on the Zachary's Karate Club social network graph dataset

PROJECTS

Teacher Recommender System | *Google Apps Scripts, HTML, MaterializeCSS*

Spring 2019 – Present

- Developed suite of scripts to automate the process of matching students with teachers who will write their college recommendation letters
- College counselors control the process from a menu with functions allowing them to create forms, send them, and run a simple scoring algorithm that generates assignments
- Students and teachers are served autogenerated Google Forms to collect their data
- Sold Alpha version and released Beta version as an official Google Sheet Add-On

Axidraw Control Software | *HTML, CSS, Javascript, Python*

Spring 2020

- Hired to build a Mac application for automating the process of writing physical notes.
- Wrote frontend (Bootstrap) and backend (Python+pyaxidraw) to allow users to send tasks to be written by an [Axidraw](#)

Heart Heist App | *Swift, Objective-C*

Summer 2018

- Built a top down shooter app using XCode and deployed it on the Apple App Store
- Used Gravit Designer and Garage Band to make art and music

TECHNICAL SKILLS

Languages: Python, Google Apps Script, Java, Javascript, HTML, CSS, PHP, MySQL, Bash, Objective-C, C++, C#

Developer Tools: Git, Eclipse, Adobe XD, IntelliJ IDEA, Pycharm, Visual Studio, VS Code, Atom, Jupyter Notebook, Google Colab, XCode, Photoshop, MAMP, SQLPro, Unity, PHPMyAdmin, Google Drive Scripting Environment, Platform IO

Natural Languages: English, Spanish (Conversational)

ACHIEVEMENTS

Won UMBC Hackathon 2020 (Cipher-Tech-Solutions challenge) with [ForeTrackR](#), a novel application of Blockchain to Chain of Custody in digital forensics

Won True Bit design competition (UMBC Hackathon)

Paper on semantic segmentation accepted into Smoky Mountain Data Challenge ([paper](#))