Christopher Baillie Olin

chris.baillie.olin@gmail.com | (202) 256-5810
5218 Marlyn Dr. | Bethesda, MD 20816

Education

University of Maryland   **College Park, MD**
B.S., Mechanical Engineering and B.S., Computer Science   **GPA: 3.98**
- President's Scholarship for Academic Achievement   Anticipated Dec. 2022

Skills

Languages: Python, Java, Ruby, Javascript, Typescript, C, C++, OCaml, Racket, R, MATLAB
Software: Solidworks, Autodesk Inventor, EES

Experience

Kroll Bond Rating Agency, Data Engineering Team   **New York City, NY**
Data Management Intern   June 2022 - present
- Modified a Flask API code generator to add authentication with Auth0 to generated APIs
- Created a user interface with Dash, allowing analysts to upload spreadsheets to run through a machine learning model and download results as another spreadsheet

University of Maryland, Digital Signal Processing Computer Aided Design Group   **College Park, MD**
Undergraduate Research Assistant   Sept. - Dec. 2021
- Debugged and translated a digital signal processing software tool from Java to C++
- Applied pre-trained computer vision models to drone footage and characterized the models' accuracy

Amazon, Prime Video Live Monitoring Team   **Seattle, WA**
Software Development Engineering Intern   June - Aug. 2021
- Built a video defect detector to monitor the quality of Amazon Prime Video live events in production
- Integrated the project with existing video monitoring tools built and maintained by other team members
- Demonstrated the impact of my project by presenting to managers of my team and adjacent teams

Agentis Air   **Rockville, MD**
Engineering Intern   Jan. - May 2021
- Developed a new test procedure to characterize an air purifier's change in performance over time
- Automated air purifier efficiency tests by modifying the test chamber and writing accompanying software
- Presented the results of tests on our product and competitors' to the marketing team and major investors

Army Research Lab, E/H-Field Sensing Team   **Adelphi, MD**
Software Development Engineering Intern   June - Aug. 2020
- Engineered a Wide Area Network to securely connect a web of Internet of Things power sensors
- Designed a secure web portal to access multiple sensors' individual configurations and data
- Summarized and explained my work to a panel of scientists and researchers unfamiliar with my team's work

Projects

Spotify Playlist Genre Analyzer - Data Science Final Project   **Python**
- Collected and visualized genre data about all songs in a Spotify playlist, using Spotify's API and matplotlib
- Analyzed the gathered data, with the goal of scoring a playlist based on the similarity of its songs' genres
- Displayed results of this study in a webpage (available at https://olincb.github.io/spotify-playlist-analysis/)

Sound Discretizer - Mechatronics Design Project   **Arduino**
- Constructed and wired a device that listens to its environment and plays back the closest tune, discretized to notes in the A440 12-note scale, in a housing that included a microphone, analog noise filters, and aux. output
- Programmed the internal Arduino, utilizing a Fast Hartley Transform to detect musical pitches
- Recorded a short video to present my project virtually

Interests

Clubs: Rock Climbing (member; former president, 2020), Ultimate Frisbee (member)
Personal: Mountain Biking, Road Cycling, Kayaking (former whitewater kayaking instructor, 2017-2019)