# Jacob Dill | Computer Science | QPA: 3.2

Carnegie Mellon University '22 | Sophomore

# Professional Experience

#### Lockheed Martin Sikorsky IT — Stratford, CT

- Application Support (Summer 2018):
  - Implemented a Python-to-Perl interface utilizing the SSH protocol into my team's application test environment. Accelerated intern training period (most new interns knew Python, not Perl)
  - Collaborated with another team of other interns to upgrade the technology in the conference room. Increased conference room utilization and more than halved reservation conflicts
- o <u>Team Site Maintenance (Summer 2017)</u>:
  - Developed, maintained, and documented the team site used the storage, accessibility, and distribution of project information. This site continued to be used into my second year.
  - Replaced decades-old data storage system using Unix terminal with Microsoft SharePoint site.

### **Projects**

#### Build18 Hackathon – Pæthos VR (2020) 🗘

- o An Oculus Quest VR experience that interacts with an EEG band to create a virtual reality experience in response to user brainwaves [JavaScript, A-Frame, Blender]
- Communicates encoded brain wave data over Bluetooth to a web server, from which the Oculus receives its display.

#### Minecraft Forge – Endgame Mod (2020)

- A mod utilizing Forge to rebalance the primary mechanics of the official Minecraft release and to add more gameplay features to the End dimension [Java, JSON, Blender, Adobe Suite, Eclipse IDE]
- o Self-taught myself the newest Forge Library through outdated documentation and online forums

#### Hack This Help Kids – Meda (2019) 🗘

A modern web portal through which medical patient information may transferred from one healthcare provider to another. Won "Best Use of Domain Award" for compatibility across webplatforms [HTML, JavaScript, CSS]

#### MIT Blueprint Learnathon/Hackathon - PhysSolver (2018)

A mobile application that auto-completes common mechanical and electrical physics equations used in secondary educational environments [Swift, iOS]

#### **Amity High School Computer Science Club President (2018)**

Competed in Lockheed Martin's Annual CodeQuest international coding competition through which
I acquired an internship [Java, Eclipse IDE]

#### **Organizations**

#### Carnegie Mellon University Senate (2019-20)

- o <u>Communications Committee</u>: Undergraduate Senate Website Overhaul
- o [HTML, CSS, JavaScript]

#### **Game Creation Society (2019-20)**

- o SMEDex: Planetary Resource Management Game
- o [Unity, C#, Object-Oriented Programming, JavaScript, JSON]

## Skills

Code: Java, Python, C#, C, HTML, CSS, JavaScript, JSON, SML, Perl, Swift

Software: Unity, Adobe Suite, Microsoft Office, Blender, A-Frame, Eclipse IDE

Operating Systems: macOS, Windows (7, 8.x, 10), Linux, Unix, iOS

#### Coursework

15-210: Parallel and Sequential Data Structures and Algorithms [SML, Unix]

15-213: Intro to Computer Systems [C, Unix]

76-270: Writing for the Professions [Microsoft Office, Adobe Suite]