

Projects

- BookKeeper: Library management system that placed first at the 2018 Florida FBLA conference
- Quizza: Mobile quiz game with a built-in editor, online multiplayer, and offline studying
- Chest Randomizer: Minecraft server plugin with 225,000+ installs
- FactorySim: Game written using LWJGL and OpenGL in Java
- Glade: Web server written in Java with an event-driven and modular design from scratch
- epistle: Chat server and client with a drop-and-play plugin system and permission support
- Chess: Chess game server written in Java using Glade

Research

- A comparative study between deep Q-learning and traditional methods for playing games
 - ★ Extended Essay in Computer Science for the IB Diploma Program
 - * Implemented the DQN algorithm based off Playing Atari with Deep Reinforcement Learning
- Attacks on RSA Cryptography
 - * Internal Assessment in HL Mathematics for the IB Diploma Program
 - * Explored the underlying mathematics behind RSA cryptosystems and possible weaknesses

TECHNICAL SKILLS

- Languages: Python, Kotlin, Java, Javascript, Typescript
- Technologies: React, Android, Node.js, Android Jetpack, JavaFX
- Tools: MongoDB, Juypter Lab, git

Honors and Awards

- NACTF 2019: Competed individually and placed first at the high school level out of 100 teams.
- FBLA Florida SLC 2019: Received first place for Quizza in the Mobile App Development category.
- picoCTF 2018: Competed individually and placed 12th at the high school level out of 3400 teams.
- FBLA Florida SLC 2018: Received first place for BookKeeper in the Coding & Programming category.
- FBLA Florida SLC 2017: Received fourth place in the Computer Problem Solving category.
- Mu Alpha Theta Florida States 2017: Received fifth place in competitive programming.

EDUCATION

Carnegie Mellon University

Pre-College Advanced Placement/Early Admission

21-127E Concepts of Mathematics, 18-100E Introduction to Electrical and Computer Engineering

Robinson Senior High School

International Baccalaureate Diploma

Math HL, Physics HL, English HL, Chemistry SL

Pittsburgh, PA

Summer 2019

QPA: 3.55/4.0

Tampa, FL Aug. 2016 - May 2020

GPA: 3.953/4.0