

PROFILE

Driven, dedicated, and proficient engineering technology student at Bergen County Academies with skills in robotics, cybersecurity, web development, programming, electrical engineering, computer vision, algorithm development, data analysis, prototyping, CAD, teamwork, collaboration, mentoring, leadership, and effective communication seeking to gain work experience.

EDUCATION

Bergen County Academies (BCA) | *Academy for Engineering and Design Technology*

Sept 2021 – Jun 2025

GPA: 3.89/4.00 | **SAT:** 1580/1600 | National Honor Society member

Relevant Coursework: CAD, Design Simulation, Machining, Electrical Engineering, Electronics, Materials Sciences, AP Calculus AB (5/5) AP Computer Science A (5/5), SQL, Arduino, C Programming, Processors, Web Development, Machine Learning, Networking, 6502 Assembly

Research: Implementing Machine Learning to analyze light spectrum data to predict plant health before onset of visible signs of disease

AWARDS / CERTIFICATIONS

GIAC Security Essentials Certification (2024)
GIAC Foundational Cybersecurity Technologies (2023)
National Cyber Scholar with Honors (2024)
American Computer Science League Finalist (2022-24)
National Spanish Exam Gold Medalist (2023)

SKILLS / SOFTWARE

Programming Languages: Javascript/TypeScript, Python, Java, HTML/CSS, MySQL, Arduino, C/C++, Kotlin, Bash, MatLab

Libraries: OpenCV, React, NextJS, Flask, ExpressJS, TailwindCSS, Pandas, Numpy, Scikit-learn, SvelteKit, Bootstrap

Software: Autodesk Inventor / Fusion360, KiCad, EasyEDA, Microsoft Office, Google Workspace, Git, LaTeX, Linux, Adobe Photoshop / Premiere Pro

RELEVANT EXPERIENCE

Titanium Knights Robotics | *Programming Lead*

Sept 2022 – present

Build and program robot for First Tech Challenge PowerPlay® and Centerstage®. Independently designed computer vision algorithm and worked to implement PID control for the 2023-2024 season. Host STEM outreach events at community centers, libraries, shopping centers.

NJ Cybersecurity and Communications Integration Cell | *Advanced Cybersecurity Intern*

Jul 2024 – present

Work with cybersecurity professionals at the NJOHSP, respond to simulated cyberattacks, develop CTF challenges and outreach materials

Capture The Flag (CTF) Club | *President, CTF Problem Writer*

Dec 2021 – present

Write, review, and deploy offensive cybersecurity challenges (CTFs) for BCCTF 3.0-5.0 for 1000+ international participants each year. Teach weekly cybersecurity lessons to prepare younger students to write CTF challenges. Increased participant count to over 2000 for BCCTF 5.0.

Recursive | *Co-Founding Member, Webmaster*

Feb 2023 – present

Launched a student-run organization designed to teach programming at community centers and local libraries at no charge to students. Taught several lessons in Python and created a new course for HTML and CSS. Designed a website using ReactJS to increase outreach.

Code for Charity Club | *Frontend Developer, Lead Developer*

Sept 2022 – present

Manage web development for charity organizations. Mentor junior programmers and delegate coding assignments. Conduct code reviews.

National Student Data Corps | *Co-Founding Member, Chapter Secretary*

Sept 2023 – Jan 2024

Onboard students with Python, Pandas, Numpy, and Scikit-learn. Assist in development of independent research project ideas.

EXTRACURRICULARS

Hospital Volunteer Intern | *Englewood Health*

Jul 2023 – Aug 2023

Transported patients in wheelchairs. Delivered laboratory samples. Managed and organized historical records for 2000+ volunteers.

Academy Scientific | *Webmaster*

Dec 2023 – present

Created a website to publish academic journals written at BCA. Set up a user-friendly system to facilitate article transfer from Google Docs.

Class Council | *Vice President*

June 2024 - June 2025

Assist in planning events for the senior class, fundraising, and organizing meetings for the class council.