# **Brendan Connelly**

Computer/Electrical Engineering – Clarkson University Class of 2027

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#### **EDUCATION**

# **Clarkson University**, Potsdam, NY — Computer Engineering

August 2024 - December 2027 Expected Graduation

Studying a rigorous computer engineering curriculum, including general engineering classes as a first-year, up to classes such as Embedded Systems, Compilers, Cryptography, and Digital Signal Processing.

# Center Moriches High School - IB Diploma

September 2020 - June 2024

Graduated with a GPA of 98, achieving the Advanced Regents Diploma with Honors Designation, in addition to my IB Diploma, which I scored 30 points on.

#### **PROJECTS**

## **KeebSocial** — Full Stack Web Project

KeebSocial is a social media platform that I have created as a project to help solidify my understanding of modern full stack web development. A full technical project breakdown is available on my website. For this project, I harnessed many technologies including Docker, HTML, CSS, JS, PHP, NGINX, and MongoDB.

### FRC 4458 — Robotics

At my high school, I was the only one on my robotics team that knew how to code. I wrote all of the software for our robot between 2021 and 2024. I'm very proud of my code from the 2024 season — we placed 2nd at our regional competition. Writing this software necessitated knowledge about many different concepts such as kinematics, controls engineering, and computer vision.

## **KDHC** — Systems/Network Programming

I created a lightweight DHCP client for Linux using C. Because of changes to the Linux kernel, this is a very low level task that involves manually formatting Ethernet frames in order to send out valid DHCP packets. The software I created is capable of standing in for the standard dhclient for use in combination with the iproute2 package (i.e. the ip link utility).

#### **SKILLS**

C

Java

Linux

Networking

HTML/CSS/JS

PHP/MySQL/MongoDB

Docker

#### **AWARDS/HONORS**

Dean's List Semi-Finalist Awarded to two junior-year students per FRC Robotics Team that have contributed the most to each team

Autonomous Award Another robotics award. While technically a team award, this specific award was a software award. For my whole time in high school, I was the only programmer on our robotics team, necessitating a comprehensive understanding of robotics programming

**High Honor Roll** Achieved 90.0 GPA or higher each semester of high school

Tebbens Steel Scholarship \$5,000 scholarship awarded to two students in district who show excellence in STEM