Luke Crimi

Computer Science and Engineering, Lehigh University - Class of 2027
Interested in robotics, embedded systems programming, artificial intelligence, automation, and autonomous systems.
U.S. Citizen

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Florham Park, NJ

EDUCATION
Lehigh University
08/2024 - present (transfer student)
-   Major: Computer Science and Engineering
-   Expected graduation: Spring 2027
-   GPA: 3.82

CERTIFICATION
-   FAA Part 107 Drone License

EXPERIENCE
Lehigh University — *Lab technician and Research assistant*
2025 - present
-   **Lab technician**: Working to set up and configure robots using ROS topics for students in an introduction to mobile robots class. Writing automation scripts in Python to expedite setup process.
-   **Research assistant**:
    -   Studying how artificial intelligence can assist students who need help with their classes. Using Python to write data scraping scripts.
    -   Created a Chrome extension using Typescript, React, Bootstrap, and a Cloudflare worker to enable students to use LLMs to assist them with coursework uploaded to Lehigh's Coursesite page. Worked with various popular APIs such as Google's OAuth and OpenAI's text completion.

Robot Revolution | Summit, NJ — *Teacher*
2020 - 2023
-   Taught an intermediate C++ course. Helped design the curriculum taught, and worked with the owner of Robot Revolution to decide what topics would be covered. Guided students to improve their programming skills.

Code Ninjas | Denville, NJ — *Sensei*
2022 - 2023
-   Assisted students with the development of several small computer programs. Led presentations to students regarding learning topics and completed various setup and cleanup tasks.

New Horizons Day Camp | Florham Park, NJ— *Summer Counselor*
2021 - 2024
-   Ran the rocketry activity for grades 2-9. Worked with a team of counselors to prepare for and organize the camp's rocket launch event. Improved time management and interpersonal skills.

Ocean Beach Trading | Ocean Beach, NY — *Retail Floater*
06/2024 - 08/2025

PERSONAL PROJECTS
Squiggly – C++, Linux, Raspberry Pi
-   Esoteric programming language developed in C++ designed to create simple games using scripts
-   Ported to a handheld console powered by a Raspberry Pi (scripts can run on any device with Squiggly installed)

Keras Code Generator – C#, Unity, app development, graphs, Keras
-   Graphical interface for creating Keras models in Python. Compiles user-generated graph structures into Python code

Bluetooth LED Light Controller – Bluetooth, Arduino, Raspberry Pi, Python
-   Created an Arduino LED light controller that communicates with a Raspberry Pi over Bluetooth
-   Raspberry Pi runs custom light patterns on a LED strip written in Python

Touchless Computer Interaction (eye/face tracking) – Python, Artificial Intelligence (Mediapipe)
-   Tracks the location and rotation of a user's face through a webcamera to move a cursor across the screen. Uses facial landmarks to determine when the user winks to emulate a mouse click

Wand Controlled LED Lights – Python, Computer vision, Artificial Intelligence, Raspberry Pi, 3D Printing, Keras
-   Uses a IR camera and a custom trained CNN model to track patterns made with a IR light reflecting wand tip

Accelerate – C#, Unity, game development
-   Created a casual game designed to be played on both computers and phones. Released to Itch.io and the Google Play Store.

Personal Website – React, Typescript, Bootstrap
-   Created a simple website to host pages for my various personal projects.
-   https://www.lukecrimi.com/

Proficient programming languages: C++/C, Python, C#, Java