Luke Crimi

Computer Science and Engineering, Lehigh University - Class of 2027
Interested in robotics, embedded systems programming, artificial intelligence, 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

Morris County School of Technology, Denville
2019 - 2023
- Computer Science Academy
- Dual enrollment with County College of Morris during senior year

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.

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 - 08/2024

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.

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