

Estuardo Lopez Letona

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Education

Carnegie Mellon University

Bachelor of Science in Computer Science

Pittsburgh, PA

Expected May 2027

- QPA: 3.54/4.00
- Concentration in Software Engineering & Minor in Social and Political History
- Activities: Acts2Fellowship, Spanish and Latin Student Association, Grappling Club

Bloomfield High School

High School Diploma

Bloomfield, NJ

June 2023

- GPA: 4.665
- Activities: Peer Leadership, Varsity Wrestling Captain, Honor Societies (NHS, Math, Science, Language), Red Cross Club, Glamour Gals Club, Varsity Soccer

Experience

CS and Mobile Development Instructor

Prime Factors Learning Lab (Supported by Apple & Rutgers)

Newark, NJ

May 2024 – August 2024

- Designed and delivered a complete curriculum, introducing 30 high school students to core CS concepts, including hardware, binary systems, data structures, and mobile development.
- Mentored and led a student team through the full app development lifecycle, from ideation to implementation, while teaching UI/UX, Swift, and GitHub (see The Pack under Projects).

Student Engineer at Generation Code

Rutgers University Newark

Newark, NJ

June 2022 – September 2022

- Selected for Generation Code, a summer program focused on iOS development and tech fundamentals.
- Built a foundation in Swift, Xcode, Command Line, and GitHub under close mentorship and instruction.

Projects

Hive

estuardolopez.com/projects/hive

Independent

April 2025 – May 2025

- Fullstack Hive game with Python backend (FastAPI, Pytest, Poetry) and React (TypeScript) frontend.
- Designed a modular MVC system with clean RESTful API endpoints and scalable game state. Turn-based gameplay with a responsive hex grid, drag/zoom, action highlights, and graph-based movement logic.

Gcode Agent

estuardolopez.com/projects/gcode-agent

PFL

March 2025 – May 2025

- Contributed to an LLM-powered chatbot using the Mastra framework, focusing on backend architecture, behavior-based design, and RAG.
- Improved DevOps with Docker, Codespaces, and GitHub Actions for local development, testing, and CI.

Personal Website

estuardolopez.com/projects/personal-website

Independent

May 2025 – June 2025

- Responsive developer showcase with Next.js and Tailwind CSS, using interactive components and Vercel.

Santorini

estuardolopez.com/projects/santorini

CMU

March 2025 – April 2025

- Fullstack Santorini game with Java backend (NanoHTTPD), includes extensive UML documentation.

The Pack

estuardolopez.com/projects/the-pack

PFL

June 2024 – August 2024

- Developed an iOS pet care app with clean UI and GitHub Projects/Issues for collaboration.

Skills

- **Programming Languages:** Python, TypeScript, Java, C, JavaScript, HTML/CSS, Swift, Standard ML
- **Technologies:** FastAPI, RESTful APIs, Next.js, React, Node.js, LLM APIs, Tailwind CSS, Docker
- **Tools & Dev:** GitHub, CI/CD, Testing, DevOps, UI/UX, Package Managers, OOP, Functional Programming, Data Structures and Algorithms
- **Soft Skills:** Communication, Collaboration, Adaptability, Organization, Leadership