

Estuardo Lopez Letona

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Education

Carnegie Mellon University

Bachelor of Science in Computer Science

Pittsburgh, PA

Expected May 2027

- QPA: 3.65/4.00
- 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, Ranked 3rd of 477
- 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.
- Collaborated with a small team to develop an iOS app, taking the lead on implementing the user interface.

Projects

Hive

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.
- Repository: <https://github.com/estulpz202/hive-game>
- Demo Video: <https://www.loom.com/share/97c65783f69949c595e1f93234da9af1>

Recruiting AI Agent (In Progress)

March 2025 – Present

- Contributing to LLM-powered chatbot built with Mastra framework (TypeScript) for PFLR recruitment.
- Leading backend development under mentorship, focusing on system architecture, UML design, Firebase integration, API development, and frontend-backend connectivity.
- Uses Docker, Codespaces, Vitest, and GitHub Actions for reproducibility, testing, and CI/CD.

Santorini

March 2025 – April 2025

- Fullstack Santorini game with Java backend (NanoHTTPD), includes extensive UML documentation.
- Demo Video: <https://www.loom.com/share/0322bac9ec2d42238ad54261231d5f29>

The Pack

May 2024 – August 2024

- Developed an iOS app called *The Pack* to help dog owners track, learn about, and manage pet care.
- Built in Swift with Xcode, focusing on clean UI. Managed collaboration using GitHub Projects and Issues.
- GitHub Repository: <https://github.com/pflc3/ThePackApp>

Skills

- **Programming Languages:** C, Python, Java TypeScript, SML, Swift, JavaScript, HTML/CSS
- **Technical Tools:** GitHub, Poetry, FastAPI, NPM/Yarn, Maven, Command Line (Bash/SSH)
- **Development Skills:** Algorithms, Data Structures, OOP, Functional Programming, Systems Programming, API Design, Full Stack, UI/UX Design, React, Version Control, Testing, DevOps Basics
- **Soft Skills:** Communication, Collaboration, Adaptability, Organization, Leadership