

# CARLOS MANUEL CEJAS

Computer Science Student | Trinity College Dublin (BSc/MSc)

U.S. Citizen with full work authorization in the United States

✉ carlosmcejas@gmail.com • 📞 (267) 443-3427 • 📍 Greater Philadelphia / Dublin

[linkedin.com/in/cmcejas](https://www.linkedin.com/in/cmcejas) • [github.com/cmcejas](https://github.com/cmcejas) • [cmcejas.dev](https://cmcejas.dev)

## EDUCATION

### Trinity College Dublin

BSc/MSc Computer Science (Integrated Masters) 2025 – 2030

### Springfield Township High School

Relevant: AP Computer Science A, Multi Variable Calculus, Engineering Design 2021 – 2025

## EXPERIENCE

### Path Planning Engineer

Formula Trinity – Autonomous Racing Team

Oct 2025 – Present

- Develop and refine path-planning algorithms in Python for the autonomous race car subsystem
- Analyze and improve ROS-based codebase; test algorithms in Gazebo simulations
- Optimize racing lines for higher speeds and reduced lap distances

### Web Developer

Parkt – Startup

May 2024 – Sep 2024

- Led development of company website, building new features and optimizing existing systems
- Consulted on operations, branding, and marketing strategies for early-stage growth
- Contributed to key startup decisions, gaining hands-on experience with product development

### Robotics Club Instructor

Volunteer – Former Middle School

Nov 2021 – Dec 2024

- Mentored middle school robotics team that won regionals under my previous leadership
- Taught FIRST Lego League programming, debugging, and teamwork skills

## PROJECTS

### AI Dungeon Master 🏆 Hackathon Winner

Claude Builder Club @ TCD Hackathon

Dec 2025

- Won "Best Team Collaboration" and "Most Creative Use of Claude" at TCD hackathon
- Built AI-powered D&D game with dynamic storytelling using Claude API, React, and FastAPI
- Implemented persistent campaigns, randomized character generation, and real-time AI responses

Tech: Python, FastAPI, React, Claude API, Vite | [GitHub](https://github.com)

### PlatePals

Drexel Digital Development Course

Jul 2023

- Developed full-stack web app connecting food kitchens with volunteers in a team of 6
- Served as full-stack developer, implementing both frontend and backend features

[github.com/CyrusGuest/PlatePals](https://github.com/CyrusGuest/PlatePals)

## SKILLS

Languages: Python, Java, JavaScript, HTML/CSS

**Frameworks:** React, FastAPI, ROS, Vite

**Tools:** Git, Linux (Ubuntu/Arch), Gazebo, VS Code

**Spoken Languages:** English (Native), Spanish (Native), French (Working Proficiency)

## ACTIVITIES & ACHIEVEMENTS

---

**Trinity:** Computer Science Society, Formula Trinity, Philosophical Society, Tennis Society

**High School:** Science Olympiad (Selected), NHS Member, DECA 2nd Place MTDM, Youth & Government Treasurer