Joseph Whelpley

703-501-3575 | jwhelple@nd.edu | www.linkedin.com/in/joewhelpleynd

EDUCATION

University of Notre Dame | Notre Dame, IN

Bachelor of Science

Major: Computer Science | Minor: Business (Engineering Corporate Practice)

Dublin City University | Dublin, Ireland

September-December 2024

Graduation: May 2026

Fall Study Abroad

EXPERIENCE

Software Engineer Intern

MyTickets May 2025 – Present

- Built and shipped 20+ production features including Stripe-powered checkout with fraud detection, real-time event tracking notifications, and advanced search filters—reducing checkout abandonment by 25% and improving UX. Refactored filtering with parallelized API requests, intelligent caching, and React Query, cutting API calls by 60% and load times by 40%.
- Diagnosed and resolved 15+ critical payment/webhook bugs, increasing reliability by 85% and lowering support tickets by 70%. Operated in an Agile, full-stack environment (React, Node.js, REST APIs, PostgreSQL), collaborating directly with startup founders to align technical priorities with business goals.

Eye-Tracking AI Researcher

University of Notre Dame | Notre Dame, IN

January 2025 – Present

- Developed a Python-based ML pipeline for collecting, cleaning, and modeling eye-tracking on a screen from Webcam data, in collaboration with Prof. Adam Czajka
- **Authored reusable data-cleaning** utilities for large eye-tracking datasets, such as image bitmap extraction adopted by other researchers in the lab.

SKILLS

Languages: Python, JavaScript, C, HTML, CSS, Java, React Frameworks & Tools: Django, Node.js, REST APIs, Linux, Git Other: AI libraries (PyTorch, Scikit-learn), Excel, Shell, SolidWorks

Projects:

- Workout Analysis App: Converted 10,000+ workout log entries into structured JSON, stored in HarperDB, and built a Streamlit web app to visualize fitness trends via API integration.
- Portfolio Website with GitHub projects: https://joewhelps.github.io/JW-website/
 Designed a responsive site with clean UI/UX to showcase my portfolio using HTML, CSS, and JavaScript.

LEADERSHIP AND ACTIVITIES

President & Instructor

April 2025-Present

Notre Dame Martial Arts Institute

Managed operations, budgets, and events; lead 4 weekly training sessions for 15+ members promoting discipline, focus, and teamwork.

Eagle Scout

Boy Scouts of America | Vienna, VA

Attained the rank of Eagle Scout by demonstrating years of dedication, leadership, and perseverance.