
OBJECTIVE

As an innovative and versatile 3rd year Computer Science student at TU Dublin, I am seeking opportunities to apply my technical skills and innovative problem-solving abilities across diverse industries. A quick learner with exceptional adaptability, I excel at rapidly assimilating new technologies and methodologies, turning complex challenges into strategic solutions. My ability to think critically, learn efficiently, and pivot seamlessly between different technological and professional contexts sets me apart. With a proven track record of quickly mastering new skills and approaching problems with creative, analytical thinking, I am committed to driving innovation and delivering impactful results in fast-paced, dynamic environments.

SKILLS

Programming Languages: Java, Python, C++, PHP, JavaScript,

Web Technologies: HTML, CSS, JavaScript, React, Django, NextJS, JWT authentication

Database Management: MongoDB, MySQL, SQL, Apache Admin, sqlite3

Software & Tools: Apache Server, Git, Unity, Laragon, Excel, Microsoft Office Suite

Game Development: Unity (C#)

Languages: Fluent in English and Polish

Soft Skills: Problem-solving, Analytical Thinking, Team Collaboration, Communication, Time Management, Adaptability, Presentation Skills

EDUCATION

Technological University Dublin | Bachelor of Science (Honours) in Computer Science

GPA: **First Year:** 3.79, **Second Year:** 3.75, **Third Year:** 3.45 | Expected Graduation: May 2026

Relevant Coursework: Data Structures & Algorithms, Software Engineering, Database Systems, Web Development, Object-Oriented Programming, Machine Learning, AI, Business Management, Project Management, Personal Development

EXPERIENCE

Project: NourishMate

- Developed NourishMate, a full-stack nutrition app using Next.js, React, and MongoDB with JWT authentication and Tailwind CSS for responsive design.
- Built a custom calorie calculator that generates personalized nutrition plans based on user metrics, fitness goals, and activity levels.
- Implemented a meal logging system with MongoDB persistence, enabling users to track nutrition intake and maintain consistency streaks.
- Created a budget tracking feature that provides cost estimates for meals and generates budget-conscious nutrition recommendations.

- Designed a secure authentication system with password hashing, JWT session management, and role-based access control for user data protection.

Project: Cellular Automata Modeling

- Designed and implemented a high-performance parallel simulation of epidemic spread using cellular automata techniques with C and POSIX Threads.
- Engineered a thread-safe synchronization system with mutexes and condition variables ensuring data integrity across parallel execution.
- Implemented complex probabilistic state transition algorithms in a grid-based simulation with unlimited scaling potential.
- Developed a memory-efficient architecture capable of handling arbitrarily large grid dimensions limited only by hardware resources.
- Applied parallel decomposition strategies to efficiently distribute computational workload across multiple threads.
- Created data visualization pipeline generating temporal progression graphs and spatial distribution plots for result analysis.

INTERESTS

Technology & Programming Languages: Passionate about exploring new technologies and programming languages to drive innovation.

Cultures & Languages: Fluent in English and Polish.

Fitness & Sports: Committed to regular gym workouts and sports, reflecting strong discipline and teamwork.

Music Production: Engaged in music production, fostering creativity and attention to detail.

Biology & Social Sciences: Interested in the intersection of technology and human behaviour, with a focus on applications in health and pharmaceuticals.