

Dylan Gakuo Mugo

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Profile

BSc (Hons) Computing student (IT stream) at TU Dublin with proven technical, leadership, and problem solving skills. Experienced in building full stack applications, managing distributed teams, and working in fast-paced operational roles at Emerald Park and Aer Lingus. I am known for adaptability, effective communication, and delivering under pressure. Seeking an entry level role in IT Support, Graduate IT, or Cybersecurity.

Technical Skills

- Programming & Software Development: Java, Python, C, JavaScript, TypeScript; OOP, Design Patterns, GUI Programming
- Web & App Development: HTML, CSS, Node.js, React/Next.js, Django, Supabase, MongoDB, REST APIs, PWAs
- Networking & Systems: Routing & Switching, LAN/WAN, IP Troubleshooting, Advanced Switching & Routing, Network Distributed Computing, Operating Systems, Parallel Computing
- Databases & Data Structures: SQL, Database Fundamentals, Data Structures & Algorithms, Data Modelling
- Software Engineering & Professional: Software Engineering Principles, Testing, Debugging, Project Management
- Other Skills: Leadership, Team Collaboration, Communication, Customer Service

Projects

- Course Connect – Student Collaboration Platform (2024–2025)

Designed and built a PWA with React/Next.js, TypeScript, Supabase, Tailwind, and Capacitor. Integrated task tracking, timetables, study groups, gamification (points, badges, coins), and notifications. Implemented reusable UI components, hooks, and API integrations. Deployed on Vercel with GitHub version control.

- Sports Logistics & Warehouse Management – Django Project (2024)

Developed a logistics system with role-based dashboards (Support Agent, Supervisor, Escalation Manager, Billing Specialist). Implemented CRUD operations and REST APIs for orders, shipments, and events. Refactored backend logic for clearer authentication, permissions, and navigation. Increased reliability with unit and integration tests.

- Parallel Neutron Transport Simulation – High Performance Computing Project (2024)

Implemented serial and parallel neutron shielding simulations in C using pthreads. Distributed workloads across CPU cores, measured performance, and visualised results with gnuplot. Produced flowcharts, pseudocode, and technical documentation for viva assessment. Explored scalability limits and performance optimisation.

Work Experience

- Team Leader – **Emerald Park** (2021 – February 2026)
 - Supervised daily ride and attraction operations, managing staff across multiple zones.
 - Created staff schedules and ensured compliance with safety procedures and training.
 - Acted as the link between staff and management to ensure smooth operations.
 - Delivered consistently strong customer experiences in a high pressure environment.
 - Achievement: Advised on new online scheduling system that improved efficiency and communication.
- Cargo & Baggage Operations – **Aer Lingus 2023-2023**
 - Coordinated baggage and cargo handling in a time-sensitive, safety critical environment.
 - Ensured accuracy and attention to detail to prevent flight delays.
 - Worked closely with ground staff to meet strict operational deadlines.
 - Strengthened teamwork, accountability, and process discipline in logistics operations.

Education

BSc (Hons) in Computing (IT Steam) – TU Dublin, Blanchardstown (Expected Graduation: 2026)

Modules include: Web Development, Networking, Data Structures, Object-Oriented Design, Operating Systems, Parallel Computing, Cybersecurity Concepts.

Additional Activities

- Volunteer at local church events and community programmes.
- Weekly football with friends and regular gym training.