

David McClung

Aspiring Software Developer | MSc AI in Business

dmcclung01@qub.ac.uk | davidmcclung.work | github.com/davidmcclungeng | linkedin.com/in/davidmcclung25

PROFILE

I'm studying for an MSc in Artificial Intelligence in Business at Queen's University Belfast. My internship at Tetra Tech opened my eyes to software development and AI automation. I'm now looking for my first role in the field, while building my skills through certifications and working on my own software projects in my free time.

KEY SKILLS

- AI-Assisted Development (Claude Code)
- Backend Development (REST, Laravel, Django) – beginner
- Frontend Development (Vue 3, TypeScript, PrimeVue) – beginner
- Structured Data & JSON Schemas
- SQL & Relational Databases – beginner
- Automated Testing (Pest, PHPUnit) – beginner
- Git & CI/CD (Azure Pipelines)
- Python (self-taught, beginner)
- Communication & Cross-team Collaboration

EXPERIENCE

Data and AI Intern | Tetra Tech, Summer 2026

- As a beginner developer, used AI-assisted coding tools (including Claude Code) to help build and maintain Bat Analytics Pro, a Laravel REST API and Vue.js SPA processing ecology survey and weather data for the internal ecology team, replacing manual reporting with automated chart and table generation.
- Helped to design a structured, schema-versioned JSON data package that consolidates processed survey data for an external AI summarisation service, including a signed, short-lived token for secure service-to-service authentication.
- Helped to specify validation gating logic so AI summary generation is blocked until required data entry is confirmed complete, an early human-in-the-loop control against acting on incomplete data.
- Contributed to automated unit, feature and endpoint tests (Pest/PHPUnit) integrated into a CI pipeline (Azure Pipelines), building early testing awareness and habits.
- Took part in brainstorming sessions with the ecology team to scope requirements, then refined the product through ongoing discussion and regular check-ins with stakeholders.

Treasurer | Newtownabbey Independent Christian School (NICS)

- Manage financial reporting and oversight of a c.£100k annual budget on a voluntary basis, demonstrating accountability, integrity and attention to detail.
- Present monthly financial reports to the management committee, communicating budget performance clearly to a non-technical audience.
- Used Python and Django to build Ledger, a replacement for the Excel-based financial reporting process, now used to process a full financial year.

Additional Experience | Premier Sound Solutions / PDG Electrical / FJM Logistics

- Media Technician / Consultant – designed and implemented audio-visual systems for clients, communicating technical requirements clearly and training 50+ end users.
- Electrician's Assistant – delivered 100+ installation and maintenance projects, troubleshooting on-site issues within a team of eight.
- Delivery Associate – delivered 300+ packages daily, consistently meeting deadlines and activity targets.

PROJECTS

Bat Analytics Pro | Tetra Tech internship

- Laravel API and Vue app that turns ecology survey and weather data into report charts and tables, and sends that data to an external AI service for report summaries.

Ledger | Volunteer treasurer, in use

- Python and Django app replacing the school's Excel-based accounts; used to process a full financial year, including 12 monthly reports and the annual report for the management committee.

Premier Sound Solutions website | Freelance, in development

- Vue 3 and TypeScript site replacing the company's old WordPress site, built to win new clients and show their installations.

EDUCATION

2025 – Present: MSc: AI in Business, Queen's University Belfast

2021 – 2024: Bachelor of Arts: Broadcast Production, Queen's University Belfast

2020 – 2021: 3 A Levels: A in Digital Technology, A in Geography, B in Business Studies; 1 AS Level: B in Design and Technology

2018 – 2019: 8 GCSEs, including an A in Digital Technology