

David McClung

Queen's Business School AI in Business MSc Student | Aspiring Graduate AI Engineer

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PROFILE

MSc AI in Business student at Queen's University Belfast, early in my hands-on software engineering journey but with a real working system to show for it: during a Data and AI internship at Tetra Tech I used AI-assisted coding tools, including Claude Code, to help build and test a REST API and a structured, schema-versioned data pipeline that packages processed data for an external AI summarisation service, including validation gating before AI processing could run. As a beginner developer I directed the requirements, architecture decisions and testing approach while leaning on AI tooling to accelerate implementation, which has given me a practical, first-hand feel for working with AI-assisted and agentic development workflows. Currently building my Python fundamentals through self-directed learning alongside my MSc. Careful, coachable and genuinely curious about production AI engineering practices such as validation, observability and responsible AI use.

KEY SKILLS

- AI-Assisted Development (Claude Code)
- Backend API Development (REST, Laravel) – 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 Summer 2026 Intern | Tetra Tech

- As a beginner developer, used AI-assisted coding tools (including Claude Code) to help build and maintain 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.
- Directed the design of 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.
- Specified 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 board members, communicating budget performance clearly to a non-technical audience.
- Self-teaching Python outside formal coursework, planning a future Django web application to replace the current Excel-based financial reporting process.

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.

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