

Mannix Graham

Mannixg.is@gmail.com | [linkedin.com/in/mannixgraham](https://www.linkedin.com/in/mannixgraham) | github.com/Mannixgr | Waterloo / Brampton, ON

EDUCATION

Wilfrid Laurier University, Waterloo, ON

Bachelor of Science, Computer Science (Honours Specialization) - Expected Dec 2027

Relevant Coursework: Data Structures 1 and 2, Software Engineering, Object-Oriented Programming, Digital Electronics, Discrete Mathematics, Linear Algebra, Artificial Intelligence, Computer networks, Data Algorithms, Ethics & Professional Practice

Certifications: AWS Certified Cloud Practitioner (CLF-C02) — Currently Preparing

TECHNICAL SKILLS

Cloud & DevOps: AWS (EC2, VPC, IAM, CloudWatch, CloudTrail), Terraform (IaC), CI/CD, GitHub Actions, Docker, Azure DevOps

Languages & Scripting: Python, Bash, PowerShell, Git/GitHub, REST APIs

Testing & Automation: Selenium, Playwright, pytest

Networking: Cisco IOS (VLANs, inter-VLAN routing), site-to-site VPN, Proxmox VE, Tailscale, Ubuntu Linux

RELEVANT EXPERIENCE

Quality & Product Support Intern | Alcohol and Gaming Commission of Ontario, Toronto, ON

Python · Playwright · Selenium · Azure DevOps · Power BI · Beautiful Soup | May 2026 - Aug 2026

- Led R&D of the team's first Playwright test automation suite **to support release-readiness smoke testing**, reducing full regression execution from 3.5 hours (manual) to 7 minutes across 14 test cases — **a 97% cut in execution time**.
- Authored a training guide and led a live demo to onboard the QA team onto automated test creation, enabling 4/6 teammates to independently build and maintain their own test cases post-internship.
- Executed 10+ Azure DevOps test cases per sprint, logging and validating defects to keep regression coverage aligned with evolving requirements, **sustaining test coverage across 5–6 sprints without gaps as requirements evolved**.
- Partnered with developers to investigate, reproduce, and validate fixes for defects via log analysis, resolving 1 defect and 5 support tickets weekly and closing tickets within 1-2 sprint cycles.
- Executed disaster-recovery test scenarios against a 24-hour recovery-time objective (RTO), documenting outcomes to support AGCO's business-continuity testing process and validate readiness across 3 critical systems.
- Built a Python tool to scrape news and social media for AGCO-related keyword mentions, surfacing volume trends to support a fellow intern's research into public perception — **later adopted by the AGCO Communications intern for ongoing monitoring**.

PROJECTS

Enterprise Hybrid AWS Environment — Cloud Portfolio Project In Progress

Terraform · AWS (VPC, EC2, IAM, CloudWatch) · GitHub Actions (OIDC) · Proxmox · Tailscale

- Built a production-structured Terraform codebase (bootstrap, modules, environments) provisioning a multi-AZ AWS VPC, EC2, IAM, and CloudWatch — **enabling repeatable, console-free infrastructure builds instead of manual setup**.
- Automated CI/CD deployments via GitHub Actions using short-lived OIDC credentials, eliminating long-lived AWS access keys and reducing the environment's credential attack surface.
- Currently extending the environment with site-to-site VPN connecting AWS to a home-lab server, to demonstrate hybrid cloud/on-prem networking and observability patterns used in enterprise environments.

Self-Managed Network & Virtualization Homelab Completed

Cisco IOS · Proxmox VE · Tailscale · Pi-hole · Ubuntu Linux · Docker · Kubernetes

- Designed and deployed a VLAN segmented home network with inter-VLAN routing on Cisco IOS, isolating device traffic by security zone to reduce lateral-movement risk - the same segmentation principle used in enterprise network security.
- Deployed a self-managed k3s Kubernetes cluster running Dockerized workloads across multiple Proxmox-hosted virtual servers, and configured Tailscale for zero-config secure remote access — **demonstrating container orchestration and remote-access security without exposing services to the public internet**.

ADDITIONAL WORK EXPERIENCE

Operations Associate | City of Waterloo | Sept 2025 – Present

- Maintained continuity of service for 200+ patrons per shift by troubleshooting incidents across facility systems and coordinating event setups with teams of 6–8 staff.

Facility Attendant | City of Brampton | Jan 2023 – Present

- Prevented unplanned equipment outages by monitoring ice, brine, and compressor systems each shift and escalating trend deviations for early incident response.