

**Honours Bachelor of Computer Science (BCS), University of Waterloo, Waterloo, ON**

**September 2019 – August 2023**

Relevant Coursework: Computer Networking, Computer Security and Privacy, Database Systems, Application Development, Operating Systems, Introduction to Artificial Intelligence, Algorithm Design and Data Abstraction, Mathematical Statistics, User Interface Design, Applied Linear Models, Sampling and Experimental Design

## Certifications

- **Cisco CCNA**
- **CompTIA Security+**
- **CompTIA Network+**
- **CompTIA A+**
- **GCP Associate Cloud Engineer**

## Professional Summary

Highly motivated IT professional with a strong foundation in networking and cloud infrastructure, eager to apply comprehensive technical skills to an entry-level Service Desk or Help Desk role. Proven ability in troubleshooting, incident management, and providing exceptional end-user support, coupled with expertise in Windows OS, Microsoft 365, Active Directory, and ticketing systems. Committed to efficient problem resolution and enhancing user satisfaction.

## Professional Experience

**Technical Fullstack Consultant, Logistics Startup**

**November 2025 – Present**

- Tasked with engineering a production-grade cloud foundation and automated delivery pipelines to modernize manual logistics operations. Orchestrated a CI/CD pipeline and cloud architecture using Azure App Service, SQL Database, and Functions; managed Entra ID for enterprise IAM. Streamlined startup operations, enabling rapid deployment cycles and achieving high system availability for critical logistics workflows.
- Required to build a scalable infrastructure capable of handling fluctuating request volumes for a growing user base. Architected a multi-tier environment utilizing Azure SQL for data persistence and Azure Functions for event-driven, serverless compute tasks. Delivered a scalable platform that maintains performance under high-load scenarios, optimizing resource costs through serverless scaling.
- Tasked with establishing a secure, centralized identity model to govern resource access and protect sensitive logistics data. Configured Entra ID (Azure AD) groups, roles, and service principals; enforced secure authentication protocols and RBAC policies. Secured 100% of user and application access points, providing a foundation for future security audits and compliance.
- Required to deploy a professional enterprise communication suite with custom branding and administrative oversight. Configured Microsoft 365 custom domains, provisioned user mailboxes, and established security configurations including SPF/DKIM/DMARC. Successfully migrated the organization to a professional email standard with centralized administration and enhanced spam/security filtering.
- Tasked with delivering high-performance, responsive web interfaces for internal logistics tracking. Engineered frontend and backend components using the Astro framework; optimized page load speeds and mobile responsiveness through modern CSS and optimized asset delivery. Improved end-user efficiency by providing a high-speed, zero-latency interface for real-time data entry and reporting.
- Tasked with introducing professional engineering rigor to an early-stage startup environment. Authored technical documentation; established Git branch protection policies; and implemented Agile development methodologies to track task progress. Reduced technical debt and deployment errors by 30% while creating a searchable knowledge base for future technical staff.

**Cloud Infrastructure Monitor & L2/L3 Support, Lion's Appliance Repair**

**June 2024 – April 2025**

- Tasked with maintaining 24/7 infrastructure stability while managing a high-priority technical incident queue. Diagnosed and resolved L2/L3 tickets involving networking, security, and performance issues via OpenProject. Maintained a consistent 100% resolution rate for critical cloud incidents, ensuring minimal business disruption for a high-volume service provider.
- Required to optimize infrastructure spend without compromising system performance or security. Orchestrated the migration of legacy AWS resources to a modernized Cloudflare stack, utilizing Workers and Pages for edge compute. Successfully reduced monthly infrastructure costs by 20% while increasing edge delivery speed and hardening security.
- Tasked with eliminating manual configuration drift and accelerating the deployment of secure environments. Engineered Infrastructure-as-Code (IaC) modules using Terraform; established standardized, secure templates for cloud resource provisioning. Reduced deployment time for new environments by 50% and ensured 100% configuration consistency across the dev/prod lifecycle.
- Tasked with modernizing legacy applications for deployment into a scalable container orchestration environment. Authored Dockerfiles for containerization; migrated services to a serverless/event-driven implementation within a Kubernetes cluster. Improved application portability and resource utilization, enabling automated scaling based on real-time traffic demand.
- Required to streamline the incident management lifecycle to improve customer service outcomes. Utilized OpenProject to track, categorize, and prioritize technical tickets; established a standardized triage process for rapid incident assignment. Achieved a 15% reduction in average ticket resolution time, significantly improving internal SLA performance and stakeholder satisfaction.

**Freelance IT Infrastructure Consultant, Self Employed**

**April 2025 – November 2025**

- Tasked with auditing and modernizing IT environments for small-to-medium businesses to support growth and secure data. Provided specialized consulting on infrastructure optimization and cloud integration for a logistics startup and appliance repair firm. Delivered stable, secure architectures that supported business expansion and protected critical financial and customer data.
- Aimed to validate professional expertise through globally recognized technical certifications while applying concepts in real-world scenarios. Successfully completed the Cisco CCNA and GCP Associate Cloud Engineer certifications through intensive full-time development. Gained foundational networking and cloud mastery, allowing for the direct application of enterprise standards to freelance projects.
- Required to protect client internal networks from unauthorized access and "east-west" traffic threats. Architected networks using

VLAN segmentation, firewall hardening, and VPN tunnels for secure remote administrative access. Established a zero-trust network posture for clients, eliminating lateral movement risks and securing remote connections. Additional Impact (Transferable Skills for Master Resume)

**Tax Accountant, H&R Block**

**January 2024 – April 2024**

- Tasked with maintaining 100% accuracy in high-volume financial data entry and regulatory compliance during peak tax season. Applied rigorous attention to detail and precision in the preparation of complex tax returns, ensuring adherence to updated tax laws. Earned the Top Performer Award for maintaining zero-error rates while processing a high volume of filings.
- Tasked with ensuring operational continuity during a branch-wide migration to a new enterprise software platform. Authored technical procedural documentation and provided direct training and support to staff on the new system's features. Led the location to achieve the highest volume of successful returns on the new system within the region.
- Required to translate intricate financial and legal concepts for clients with diverse technical backgrounds to ensure understanding. Developed simplified communication strategies and technical explanations tailored to each client's level of familiarity. Facilitated successful filings for a diverse client base, ensuring transparency and high customer satisfaction scores.
- Required to manage high-pressure, customer-facing interactions and resolve disputes regarding sensitive financial outcomes. Utilized professional de-escalation techniques and active listening to address and resolve client frustrations and service conflicts. Maintained a professional service environment, successfully turning negative interactions into resolved cases.

**Fullstack Developer, Lion's Appliance Repair**

**August 2023 – November 2023**

- Tasked with eliminating a bottleneck caused by manual, error-prone weekly billing and data entry processes. Engineered an automated billing pipeline using Google Apps Scripts to synchronize data across cloud services. Successfully reduced weekly manual processing time by 90%, significantly increasing administrative efficiency.
- Required to modernize the deployment lifecycle to ensure code stability and reduce manual release errors. Architected automated CI/CD workflows via GitHub Actions that governed testing, builds, and production releases. Accelerated deployment frequency and eliminated manual release failures through standardized automated gates.
- Tasked with centralizing fragmented operational workflows into a unified internal system for employees. Developed custom internal tools and an employee portal utilizing Python (Django and Flask). Streamlined the internal operational lifecycle, providing a centralized hub for workflow management and data access.
- Required to automate the processing and analysis of large-scale image datasets for technical appliance diagnostics. Built a data processing pipeline integrating scikit-learn for analysis and Pillow for automated image manipulation. Enabled rapid, automated processing of diagnostic images, improving data-driven decision-making speeds.
- Tasked with building a high-performance, mobile-first presence for the company to improve user engagement. Engineered a responsive platform using Astro, React, TypeScript, and Node.js. Delivered a modernized web presence with optimal performance scores across all device types.
- Tasked with maximizing search visibility and page-speed performance to drive business growth. Deployed a full-stack platform using Node.js and Astro, implementing advanced SEO and caching strategies. Achieved a 90+ Lighthouse performance score, significantly improving search rankings and site responsiveness.
- Required to provide robust, maintainable interfaces for internal employee resource management. Built secure, modular landing pages and apps using Python/Django; ensured high code quality through standardized testing. Provided employees with a reliable resource platform, reducing manual support requests for internal data retrieval.

**Fullstack Developer, Oakville Town Taxi**

**April 2020 – October 2020**

- Required to manage 24/7 availability for a critical, high-traffic transportation booking platform. Oversaw the full lifecycle of the AWS S3-hosted platform, monitoring health metrics and optimizing performance. Maintained a consistent 99.9% service uptime, ensuring reliable booking access for thousands of users.
- Tasked with protecting sensitive user data and ensuring system stability under peak traffic loads while optimizing cloud cost. Implemented AWS Secrets Manager, configured Elastic Load Balancing, and enforced TLS encryption for data in transit. Significantly hardened the platform's security posture and improved load handling, reducing potential vulnerabilities and latency.
- Required to eliminate recurring manual errors that led to platform downtime during updates. Designed and deployed automated CI/CD pipelines via GitHub Actions for the AWS environment. Successfully eliminated manual release errors, ensuring predictable and stable platform updates.
- Tasked with creating a modern, scalable web interface for a high-traffic commercial application. Led the frontend and backend development using a Node.js/JavaScript stack, deploying directly to AWS S3. Delivered a high-performance, responsive site capable of scaling with user demand.
- Required to optimize the end-user experience by reducing page load times and hardening site defenses. Configured load balancing, Gzip compression, and browser caching alongside AWS-native security tools. Improved page load speeds and hardened the infrastructure against common web-based attack vectors.

**Technical Support & Infrastructure Consultant, Contract**

**June 2016 – July 2018; Residential Projects April 2025 - August 2025**

- Tasked with deploying and maintaining mission-critical IT and AV infrastructure across commercial, residential, and community environments, requiring high-reliability networking and immediate incident resolution. Engineered structured Cat6e/AV cabling systems to TIA/EIA standards; provisioned and imaged Windows 10/11 devices with Microsoft 365; and configured 2.5Gbps ethernet switches and radio dispatch software under senior guidance. Achieved 100% system uptime for 50+ high-stakes community events and daily commercial operations; authored technical procedural documentation that reduced future hardware setup time by 20

## Projects

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### Hybrid Infrastructure & Network Engineering Lab

- Tasked with architecting a high-availability, multi-OS (RHEL 10/Debian 12) hybrid infrastructure to replicate complex enterprise workflows, requiring zero-trust security, unified identity management (IAM), and proactive system observability. Achieved 100% parity with Azure-native monitoring via a self-hosted Prometheus/Grafana/Loki stack; engineered self-healing network remediation scripts that automatically resolve IPVS/iptables conflicts, ensuring 99.9% service uptime for critical collaboration tools (Nextcloud/Jellyfin). Orchestrated an Ansible-driven CI/CD pipeline to deploy a Kubernetes cluster featuring Cisco Catalyst 3650 VLAN segmentation and LACP redundancy; integrated a centralized Identity Stack (FreeIPA, Keycloak, Entra ID) with OIDC/SSO for secure application access; and implemented CIS benchmark hardening across all nodes.

### Game Simulation Framework & Analytics Platform

- Tasked with engineering a secure, full-stack analytics ecosystem requiring automated ETL pipelines, cloud-native identity management, and real-time visualization of complex telemetry datasets. Orchestrated a Flask (Python) backend integrated with MongoDB Atlas for data persistence; administered Azure Active Directory (Entra ID) and GitHub Organizations to manage RBAC, service principals, and branch protection; and engineered Grafana dashboards for KPI monitoring. Achieved a secure, production-ready platform with 99.9% uptime and 100% visibility into simulation metrics; successfully automated user provisioning and CI/CD service identity management, reducing manual administrative overhead by an estimated 30%.

### Penetration Testing & System Hardening

- Tasked with conducting a full-stack security audit to identify vulnerabilities across web applications, encrypted API communications, and low-level system utilities that could lead to data breaches or unauthorized privilege escalation. Executed a multi-vector testing strategy: performed XSS and SQL injection via PHP forms; implemented libsodium/NaCl encryption (PSK/PKE) for API security; and developed C-based exploits to validate buffer overflows and TOCTOU race conditions using memory debugging. Successfully identified and mitigated 100% of discovered vulnerabilities, authoring CVSS-scored technical reports that provided remediation plans such as parameterized queries, input sanitization, and stat-based file verification to prevent future attacks.

### OpenFlow Mininet Routing

- The project aimed to research and optimize network efficiency and throughput across simulated multi-ISP routing scenarios, requiring granular control over routing policies and custom traffic engineering. Configured and analyzed Software-Defined Networking (SDN) routing policies using OpenFlow in a Mininet simulation, developing custom Python/POX controllers for advanced traffic engineering experiments. Demonstrated improved data flow efficiency and enhanced network throughput by X% (if quantifiable) across various simulated ISP networks, validating advanced network segmentation and access control techniques.

### Kotlin & Java Application Development

- Tasked with lead development for a suite of high-performance applications—including a real-time game engine, a multi-mode image processor, and a mobile PDF annotation tool—requiring strict state management and cross-platform stability. Orchestrated the development lifecycle using Jira for ticket tracking and sprint planning; implemented Model-View-Controller (MVC) architectures in Kotlin/JavaFX to handle asynchronous user inputs, image transformations (zoom/rotate), and bitmapped PDF rendering. Delivered functional, scalable applications with zero-latency UI responsiveness on 100% of android and iOS sdks; successfully managed deployment across Android and JVM environments, utilizing Git for version control and peer code reviews to maintain code integrity.

## Technical Skills & Competencies

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- Networking (L1-L7): Cisco IOS/NX-OS, VLAN/VRF Segmentation, OSPF, BGP, 802.1X, RADIUS, LACP Redundancy, QoS, NAT, VPN (WireGuard/OpenVPN), CoreDNS, DHCP (ISC Kea), SDN (OpenFlow), CDP, TIA/EIA Structured Cabling (Cat6e), Patch Panel Termination.
- Security & Identity (IAM): Azure Active Directory (Entra ID), FreeIPA (LDAP), Keycloak (OIDC/SAML), RBAC, mTLS, PKI (cert-manager), NetworkPolicies, CIS Benchmarks (RHEL/Debian Hardening), AppArmor, IDS/IPS (Snort/Suricata), Wireshark, OAuth2-Proxy.
- Cloud & Orchestration: Microsoft Azure (App Service, SQL, Functions, Arc), Kubernetes (Kubespray, K3s, k8s), Docker, Containerd, Podman, Terraform (IaC), Ansible (Automation), GitHub Actions, Azure Pipelines, ArgoCD, Helm, Kustomize.
- Monitoring & Observability: Prometheus (Advanced SNMP/IPMI Exporters), Grafana (Custom Dashboards), Loki, Fluent Bit (Log Aggregation), Splunk, NetFlow, sFlow, Open-source NMS, Hardware Health Monitoring (BMC/IPMI).
- Programming & Scripting: Python (Django, Flask, FastAPI), JavaScript/TypeScript (React, Node.js, Astro), Java, Kotlin (Android/JVM), C, C++, Go, Bash, PowerShell, R, SAS.
- Databases & Storage: MongoDB Atlas, PostgreSQL, MySQL, SQLite, Redis, Elasticsearch, NFS (Distributed Storage), AWS S3 (Static Hosting).
- Technical Support & Operations: ITIL v4 Framework, Jira Service Management, ServiceNow, OpenProject, Ticket Lifecycle (L2/L3 Support), Windows 10/11 Enterprise, Microsoft 365 Admin, Device Imaging, SLA Management, Knowledge Base (KB) Authoring.
- Operating Systems & Lab Hardware: RHEL 10, Debian 12, Windows Server, GNU/Linux, Cisco Catalyst Switches, Dell PowerEdge Servers, Raspberry Pi Clusters, UPS Systems, Mininet.