

TAHA BUYUKTEPE

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Ottawa, Ontario

EDUCATION

Honours BSc in Computer Science and Minor in Economics

Sep 2021 – Apr 2026

University of Ottawa (Ottawa, ON)

- Relevant courses: Artificial Intelligence, Information Retrieval, Design and Analysis of Algorithms, Databases
- Awards: Adobe Systems Canada Scholarship (\$3,700); FLS Scholarship (\$3,000)

PROFESSIONAL EXPERIENCE

Software Developer (Co-op/Internship) - Nokia, Ottawa, Ontario

Apr – Aug 2025

- Led end-to-end design and delivery of an internal SSH key-management portal in PHP/TypeScript with MySQL for ~500 engineers across RHEL 8/9 environments.
- Shipped a production release with LDAP authentication, RBAC, session security, and HTTPS to improve secure developer access workflows.
- Standardized key-only SSH and SSH-tunneled VNC through Apache Guacamole, improving security and reducing friction for remote Linux access.

Software Developer (Co-op/Internship) - Environment Canada (ECCC), Gatineau, Québec

Sep 2024 – Mar 2025

- Built and shipped fixes and enhancements in C# / ASP.NET MVC backed by Microsoft SQL Server for a production regulatory reporting system.
- Resolved schedule logic defects and optimized SQL queries in reporting workflows to improve accuracy and performance.
- Worked in Azure DevOps and Visual Studio across version control, code reviews, CI builds, and deployment workflows.

Software Engineer (Co-op/Internship) - Nokia, Ottawa, Ontario

Jan – Apr 2024

- Built a Python-based router telemetry collector on Gentoo Linux to SSH into SROS and SR Linux devices and structure operational data.
- Developed an internal React dashboard to visualize scheduled telemetry data and improve operational visibility.
- Improved reliability by adding parallel polling, retry/backoff, and timeout handling for unstable network links.
- Added automated validation scripts and release runbooks to improve maintainability, catch regressions earlier, and support safer incremental releases.

System Administrator (part-time, weekends) - The Ottawa Hospital, Ottawa, Ontario

Mar 2022 – Present

- Automated IAM and data center workflows with Python and PowerShell in a 20k+ user enterprise environment.
- Supported VMware infrastructure operations and critical server restore activities.

PROJECTS

SentinelFlow

- Built a cloud-native security event triage backend in Python/FastAPI that ingests multi-source security events, normalizes them, and groups them into incidents using rule-based and embedding-assisted workflows.
- Deployed containerized API and worker services on AWS ECS, with SQS for asynchronous processing, S3 for raw event archival, and RDS PostgreSQL + pgvector for incident storage and similarity search.
- Implemented AI-generated incident summaries and recommended remediation steps, while maintaining automated validation, fallback logic.
- Wrote pytest unit and integration tests, added structured logging and CloudWatch metrics, and built GitHub Actions CI/CD pipelines for testing, image builds, and deployment.

RELEVANT SKILLS

- **Languages:** Python, TypeScript/JavaScript, Go, C#, Java, SQL, Bash, C/C++
- **Backend & Data:** FastAPI, REST APIs, async processing, PostgreSQL, MySQL, SQL Server, pgvector
- **Frontend:** React, Next.js, Vue, HTML/CSS, Bootstrap, Vite
- **Cloud & DevOps:** AWS (S3, ECS, RDS, SQS, CloudWatch, IAM), Docker, Git, GitHub Actions, CI/CD, Ansible
- **Testing & Systems:** pytest, unit testing, API/integration testing, Linux (RHEL/Ubuntu), SSH, TLS/HTTPS