

## Software Engineer, Full Stack

*Technically minded and solution-oriented software engineering professional with 6+ years' experience delivering system architecture, scalable application development, and front-end and back-end software projects within scope guidelines.*

Proficient in Agile Software Development Lifecycle (SDLC); expert in designing, implementing, debugging, and optimizing software modules that exceed organizational and user expectations. Instrumental in developing, testing, and executing front-and-backend solutions by employing expertise in modern web stack. Specializing in Python, C# .NET, and TypeScript with experience in React, Node, and .NET. Talent for resolving bugs, refactoring in existing programs, system architecture, and streamlining software engineering processes. Dedicated to bringing innovative solutions to life and fixing technical issues. Firm advocate for respect, integrity, and accountability within the field on a daily basis.

### Areas of Expertise:

Object-Oriented Programming | Software Development Life Cycle (SDLC) | Front-end & Back-end Development | Data-Intensive Application Design | Test Driven Development | Software Architecture | Feature Development | Debugging | Unit Testing

## Technical Proficiencies

<b>Operating Systems &amp; Software:</b>	Windows   Linux   Mac   C#   .NET   Embedded C   C++   React   Python   JavaScript   TypeScript   Node   NestJS   FastAPI   PostgreSQL   MongoDB   Redis   Elasticsearch   Kibana   Hydra
<b>Tools and platforms:</b>	Visual Studio   VSCode   GitHub   Bitbucket   GitLab   Git   SonarQube   Spinnaker   Cloud Services (AWS, Azure, GCP, Terraform)   draw.io   PlantUML   Jira   Confluence

## Career Experience

### CyberQP – Remote, Ontario, CA

Sept 2023 – Present

Cyber security – Empower MSP technicians to manage and control access.

#### Software Engineer

Designing, implementing, and improving software applications in the cybersecurity space. Providing services and solutions to IT professionals for enabling improved security posture while reducing their overall workload.

#### Notable Contributions/Achievements:

- Led a project for software development improvement and acceleration that added infrastructure for intelligently organizing deployments and simplifying releases, contributing to a doubling of the previous release rate.
- Designed and implemented an admin portal (React, FastAPI) for improving support team capabilities and simplifying future customer requests, overall reducing engineering and DevOps change requests by approximately 50%.
- Headed and implemented a scalable notifications service (NestJS, Redis) to deliver system notifications reliably and in real-time, resulting in significantly improvements (~80% to >99%) to feature reliability and customer satisfaction.
- Designed, led, and performed technical interviews for mid-level and senior software engineer candidates, resulting in the hiring of two individuals currently contributing to development.
- Undersaw and performed an overhaul of onboarding documentation in its entirety including; step-by-step setup, introductory and system wide architectural diagrams, automated project setup scripts, and new-hire mentoring, resulting in a faster, more pleasant, and more streamlined onboarding for engineering team members.

### MDA – Brampton, Ontario, CA

Feb 2022 – Sept 2023

International space mission partner specializing in robotics, satellite systems, and Geointelligence.

#### Int. MTS – Software (Architect, Scrum Master)

Facilitating design, development, and architecture of the Command-and-Control software for the Canadarm3 mission control center in conjunction with NASA's Artemis program. Provided high-level software design, documentation, and prototyping.

#### Notable Contributions/Achievements:

- Excelled as Scrum Master leading a group of junior developers; supported development teams in establishing new designs, technologies, and best practices for successful software deployment.
- Improved software scalability for future development and enabled a critical demo to the Canadian Space Agency by leading a successful refactoring initiative implementing a .NET microservice backend for a mission control center.

- Headed mission control backend software development; educated fellow engineers on Visual Studio development platform, C# and React best practices, and implementation of 30-40% of structural code to initiate the codebase.
- Designed and prototyped a scalable video streaming service (Java) in-line with multiple NASA-specified requirements, resulting in simplified implementation and multiple successful demos allowing the program to progress phases.

**Fibos Inc. – Toronto, Ontario, CA**

**June 2019 – Feb 2022**

*Development of fiber optic sensor technology, sensor system solutions, and industrial cyber security applications.*

**Junior Software Developer**

Led software development for an embedded device test suite in .NET, including C++ plugin development. Released a set of embedded laser module features for three partners by collaborating with the CEO and CTO. Conducted extensive testing of an in-house vulnerability reporter across a diverse range of industrial devices by collaborating with Centennial College.

**Notable Contributions/Achievements:**

- Created and launched a software suite of applications (C#, C++) that interfaced with Fibos-embedded devices.
- Designed, implemented, debugged, and optimized software modules (Embedded C) for Fibos optical gain amplifier to meet expanding feature needs and customer expectations, resulting in multiple successful releases.
- Architected and deployed a software solution using Python and an ELK Stack that provided industrial asset discovery and vulnerability assessment, supporting a successful initial product launch and providing a path to future funding.
- Accomplished a multi-year project by finishing and delivering a comprehensive package of thoroughly tested laser module software (Embedded C) allowing the product to proceed to the integration phase with three major partners.

**L3Harris WESCAM – Burlington, Ontario, CA**

**May 2017 – Sept 2018**

*Global leader in the production of EO-IR imaging systems.*

**Systems Engineering Co-op**

Conducted comprehensive regression testing on a variety of WESCAM turrets after production cycle, ensuring fulfillment of system requirements and functional features. Led required testing of system simulators with an external engineering firm.

**Notable Contributions/Achievements:**

- Enhanced an established software suite (C#) for system testing that expanded scope of automated system testing.
- Coordinated and advised an external firm on turret simulator development to achieve feature parity with physical devices ultimately enabling delivery of multiple qualified simulator units to customers.

## Signature Projects

**AWS Bootcamp**

**2023**

- Performed implementation of a social media site by deploying a diverse range of Cloud Compute services hosted by AWS, including Cognito, Lambda, X-Ray, RDS, S3, Route 53, ECS, CloudWatch, and CodePipeline.
- Developed and deployed new applications and services by leveraging Docker and a range of technologies, such as Python Flask, React, Postgres, DynamoDB.
- Engaged in remote development, debugging, solution architecture, system-wide event tracing, authentication, and authorization of implementations, while adhering to industry best practices.
- Leveraged AWS CodeBuild, CodePipeline, and CloudFormation to establish a readily deployable infrastructure and CI/CD pipeline, allowing seamless development and redeployment.

**Engineering Capstone Project - 2nd Place**

**2018 – 2019**

- Designed multiple nodes with ability to communicate within a mesh network, collect temperature and humidity levels, and recharge through solar panels.
- Developed and deployed a WPF app exclusively for graphing and interacting with network nodes.

## Education & Certifications

**Graduate Degree Candidate - Master's, Computer Science (MSc), AI, ML**

**2026**

Georgia Institute of Technology, OMSCS – Atlanta, Georgia, US

**Bachelor of Engineering (B.E.), Mechatronics, Robotics, and Automation Engineering**

**2019**

McMaster University – Hamilton, Ontario, CA

**Azure AZ-900 Certification**

**2023**

Certified to possess a solid grasp of fundamentals of cloud computing concepts and Microsoft Azure.