Christopher **Long**

SOFTWARE DEVELOPER · CLOUD & SECURITY ENGINEER

☐ (+1) 905-621-3275 | ✉ c9long@uwaterloo.ca | ⌂ profile-c57n.onrender.com | ⬚ c9long | ▦ c-r-long

Education

University of Waterloo *September 2021 - April 2026 (expected)*
BCS Computer Science, Honours Co-op *Waterloo, ON, CAN*
- Operating Systems, Algorithm Design, Application Development, Object-Oriented Programming, Databases
  - 2022 *Nortel Institute Scholarship*, $3500 awarded for academic performance
  - 2022 *President's Scholarship for Distinction*, $2000 awarded for attaining 95% average or higher

Skills & Tools

Languages Ruby, C#, SQL, HTML, CSS, Go, C++, Java, Kotlin, JavaScript, TypeScript, Python, C, Bash

Tools OAuth 2.0, ORY Hydra, Warden, Capybara, RSpec, MySQL, Docker, Git, GitHub Actions, SQL Server, SSMS, VS Data Tools, jQuery, Linux/Unix, NodeJS, Excel, Postman, Jira, Confluence

Frameworks Ruby on Rails, Selenium WebDriver, Tensorflow, PyTorch, Jetpack Compose, React, Tailwind, NextJS, Bootstrap, Angular, ktor

Platforms Unity, New Relic, JFrog Artifactory, Azure, AWS, ServiceNow

Work Experience

Software Developer — Clio *January 2025 - Present*
- Integrating OAuth 2.0 authentication via an Identity service across all Clio applications with ORY Hydra and Ruby on Rails
- Contributing customer-facing code to the Clio suite of products Manage, Grow, Accounting, Billing, Identity, Admin applications and services
- Deprecating legacy authentication systems and migrating users to centralized Identity service to support future mandated MFA endeavours
- Enabling independent law firms to set up their own SAML authentication configurations into Clio's application suite
- Building user authentication into the Firm Admin service via individual Warden strategies for SSO and SAML configurations

VR Developer — Flightline Training Services *May 2024 - December 2024*
- Transformed VR design ideas into functional VR applications, prototyping and building next generation VR products in Unity3D and C#
- Analyzed, designed, developed, and debugged real time VR software for prototypes and user experiences
- Produced VR/AR experiences that are viewable on mobile devices (Meta Quest Headsets) and on web interfaces (WebGL platform)
- Created photorealistic experiences with Blender-designed and purchased 3D models

Cloud Platforms Engineer — Manulife *May 2023 - August 2023*
- Created a NodeJS script using Apigee API to migrate 10% of all endpoints from Apigee to Microsoft API-M
- Built a webpage to service 100+ project managers awaiting approval for internal corporate request tickets, reducing ticket wait time by 83%
- Built 10 New Relic synthetic monitors to monitor the health of cloud infrastructures in tandem with MoogSoft AIOps alert system
- Resolved a variety of daily incident, catalog, and PaaS tasks requested by all teams within Manulife ETS as part of DevPlat Reliability DevOps

Cyber Security Analyst — Manulife *May 2022 - August 2022*
- Automated the onboarding process in Manulife Global Cybersecurity Services using Microsoft Power Apps, Power BI, and Power Automate
- Designed and deployed an application for 50 team leads and managers in Power Apps and integrated its use to load and transform employee information stored in existing SharePoint List databases
- Used Power Automate workflows, Power Apps, and Power BI, designed and constructed a prototype ELT data pipeline to provide employee data analytics and produce a live-updated dashboard for upper management

Projects

Personal Portfolio REPOSITORY LINK
- Responsive portfolio page built with Ruby on Rails, Bootstrap, DartSASS-Sprockets
- Deployed and hosted on Render

Basic Rails CRUD App REPOSITORY LINK
- Basic Rails CRUD app following the Rails guide with a Postgres database

Disable Legacy Auth into Manage and Grow PRIVATE REPO
- Designed and built flows to replace existing functionalities supported by legacy authentication services
- Disabled legacy authentication in Clio's 2 largest applications via a killswitch approach, responding to internal and customer feedback
- Thoroughly tested throughout in development, testing, and staging environments

User Authentication into Firm Admin PRIVATE REPO
- Built user authentication methods into Clio's Firm Admin service, according to Senior Software Developer's design spec
- Implemented using Warden, existing internal Identity SSO service, and SAML authentication available via the internal standards gem