

Christopher Long

SOFTWARE DEVELOPER · CLOUD & SECURITY ENGINEER

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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

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

VR AME Simulation: Student

PROPRIETARY

- As VR lead developer, I was responsible for managing the 3D modelling work of 3 graphic designers, reporting my progress to the Technical Program Director, and the Director of OARP
- Built a VR application aimed at sparking interest in the aviation industry, specifically for maintenance engineering
- Built with C# in Unity, 3D models created or adjusted in Blender, and deployed with Unity Universal Rendering Pipeline (VR Core)