# LUCAS M.K. MAYALL

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#### **EDUCATION**

#### **BSc. Combined Major in Computer Science and Statistics**

Victoria, BC

University of Victoria

September 2019 - April 2023

#### **TECHNICAL SKILLS**

Languages: C#, TypeScript, Python, SQL, Bash, PowerShell, Lua, C

Frameworks/Libraries: ASP.NET, ReactJS, SvelteJS, Django, Windows Forms, TensorFlow Developer Tools: Atlassian Suite, Git, Docker, Azure, AWS, PostgreSQL, Cloudflare DNS & CDN

Other Skills: Linux System Administration, Product Photography

Hobbies: Rock Climbing, Mountain Biking, Backcountry Snowboarding, Hiking, Camping, 3D-Printing, Home Lab

#### EXPERIENCE

## **Developer** | C# ASP.NET, Python, PostgreSQL, Docker, Bamboo Bright Health Software Society

October 2023 – Present Vancouver, BC (Remote)

- Developed a user management web app with ASP.NET, SvelteJS, TypeScript and PostgreSQL.
- Created a system for fast atomic updates to a combined user record across many distributed databases.
- Implemented feature requests and bug fixes on legacy apps (WPF RDP logon app and many small Python utilities)
- Developed a data retrieval and processing pipeline to automate dataset creation (e.g., drug and pharmacy lists), enabling weekly deployments instead of the existing multi-year cycle.
- Used Bamboo to deploy and schedule automated data pipelines with Jira integration and email notifications.

#### Full Stack Web Developer | Python, ReactJS, AWS, Docker

June 2023 – October 2023

Fathom Scientific Ltd.

Vancouver, BC (Remote)

- · Primary developer of a SaaS application for time series visualization using React JS, Django, and PostgreSQL.
- Implemented a distributed task queue with Python Celery and RabbitMQ.
- Developed a Docker based OpenVPN server with a monitoring API to enable device connection analytics.
- Used the monitoring API and task queue to automate the previously manual retrieval of device sensor data.
- Administered AWS EC2 instances and S3 buckets, along with Cloudflare CDN and DNS.
- Spearheaded service containerization with Docker, reducing deployment time and stopping configuration drift.

### Junior .NET Developer | C#, Windows Forms, MS SQL Server

September 2022 - June 2023

Esquimalt, BC

Department of National Defence (Canada)

- Implemented PDF form d automation in C# to streamline a decade-long backlog of asset management tasks.
- Designed user interfaces for Windows Forms applications, gathered feedback, and iterated on designs.
- Performed Code Reviews; documenting findings and reporting to lead developers.
- Designed SQL stored procedures for data aggregation with an emphasis on performance.
- Worked remotely in a self-directed manner while maintaining a full course load.

#### IT Technician Co-op

April 2022 - September 2022

Esquimalt, BC

Department of National Defence (Canada)

- · Achieved Federal Reliability security status
- Swiftly became an effective member of the team by quickly familiarizing with IT infrastructure and policies.
- Developed strong relationships with clients while identifying and resolving technical issues.
- Triaged and resolved interdepartmental roadblocks resulting in the revival of multiple stalled projects.
- Identified an opportunity to streamline and automate an asset management task with a decade-long backlog.
- Rapidly developed a prototype JavaScript web application to automate PDF form filling to automate this task.
- Was offered a position as a Junior .NET Developer to further develop prototype application.