TYLOR PATER

#21 1440 Ord Road
Kamloops, British Columbia
Cell: 867-689-5669
Email: tylor@tylorstech.com

EDUCATION

Bachelors of Computing Science (Minor in Management), Third Year
Currently in my third year pursuing a Bachelor of Computing Science degree with a minor in Management at Thompson Rivers University.

VOLUNTEERING

TRUSU Anime Club
President - September 2017 - Present

TRU Computing Science Club
Treasurer - Sept 2016 to Sept 2017
Web Admin - Sept 2017 - Present

1st Falkland Beaver and Cub Scouts
Leader, February 2015 to September 2016

Army Cadet, RCACC 1705 BCDs
2010 to 2015

HIGHLIGHTS

ASP.NET Timeclock System
Included vacation pay, statutory holiday, and RFID clock-in functionality.

Kamloops Campus Companion
Mobile app that saves time for students by aggregating various information.

Cypress Robotics Website
Check it out: https://cypressrobotics.ca

HOBBIES

When I'm not hard at work studying or tinkering on my home Linux server, you can often find me working on my personal programming projects. I also enjoy being outdoors, and love to canoe, camp, hike, and bike.

SKILLS

- Experience using Linux and virtualization, including ESXi and XenCenter/XCP-NG
- Experience with databases such as SQlite and MySQL, SQL Server and Access
- Advanced experience with C#, WPF, ASP.NET, UWP, and .NET Core; basic experience with various others
- Experience with Android Studio and Xamarin
- Strong writing and communication skills
- Have lead and supervised teams with 20+ people

WORK EXPERIENCE

Software Developer Co-Op
Axis Forestry Inc./Cypress Robotics - April 2018 to Present
Tasked with improving our control system for tree processors., written using Qt Quick. Contributed to both the backend and frontend, improving multiple areas such as the joystick mapping interface, CAN message parsing, database access, and performance. Prototyped different hardware we were developing and wrote microcontroller firmware for Atmel 328P.

IT Support Co-Op
Axis Forestry Inc. - Dec 2017 to Present
Handle support tickets, performing maintenance on workstations and servers as required. Set up Active Directory. Managed XenCenter and VSphere hypervisors. Worked with Windows and Linux-based server OS's. Administered Office 365/AAD and linked to on-prem AD.

Computer Technician
Staples Vernon - Oct 2015 to Jun 2016
After being quickly promoted to the head technician, I handled hardware and software repair on computers, remote service calls, customer complaints, and computer sales as well as taking support tickets.

Unit Public Affairs Staff Cadet
Whitehorse CTC, Vernon CTC - Summers of 2014 and 2015
I was primarily sent with platoons of cadets on various exercises to take photographs for the CTCs photo sharing page, as well as conduct interviews to submit to newspapers and social media.

TYLOR PATER

#21 1440 Ord Road
Kamloops, British Columbia
Cell: 867-689-5669
Email: tylor@tylorstech.com

PROJECTS

Kamloops Campus Companion
This is a mobile app written using Xamarin.Forms, which allowed me to share a significant amount of code between iOS, Android, and Windows 10, while keeping platform-specific looks. This app lets students view their course schedules, final exam schedules, grades, and more, all in one simple, easy-to-use app. You can check it out at https://tylorstech.com/kcc

Cypress Robotics Control System
I joined the Cypress team around January 2018 and since have worked primarily on the backend (C++) code. This software interfaces with our proprietary hardware to control the hydraulic systems on a forestry processor head using the CAN bus. I've worked on many parts of the software, including rewriting the joystick input library, adding networking support, and creating a simpler build system. I also helped work on some hardware, including breadboarding a prototype system and writing firmware for our Atmel-based microcontrollers, and created a stripped down distribution of the operating system to be used on the deployed systems which decreased boot times by over 300%.

"Treeage" - Cypress Robotics Diagnostic Tool
This software, written using Qt and C++, allows users of the Cypress Robotics Control System to diagnose issues with their processor head. It uses CAN communication to interface with the many sensors, encoders, and microcomputers that the system uses to operate the hydraulics.

"Clocker" - ASP.NET Timeclock System
I developed this software while working at Axis Forestry as our current timeclock solution was buggy and broke often, leading to headaches for our administrative staff. This software used RFID tags to manage users clocking in and out, and runs inside a website that was displayed on a tablet. It calculated overtime based on BC labour laws, and would allow users to export data in Excel format. Later, I also wrote a mobile app using Xamarin to enable workers in the field to use the system as well. It used ASP.NET Core, and leveraged MySQL through Entity Framework.

Cypress LiveLog
This proof-of-concept web application allowed us to have a live view of all of the systems currently deployed in the field. It allowed us to remotely connect via VNC or SSH in the browser, and showed system logs and other diagnostic information. It used C# in the backend and React with TypeScript for the UI.

QuickBooks Connector
This program allows Axis to synchronize their on-premise QuickBooks data with their website. It uses the official QuickBooks API, and is written in C#.

Kinect Pong
I developed this program in the first three weeks in my Game Development 1 course as my initial idea for my final project. It used an Xbox 360 Kinect sensor to track body movement of two players and use their movements to control the paddles on either side of the screen. Although it worked very well, I felt it didn't really fit within the scope of the course. I used MonoGame for this project.