MUSTAFA BAYIRLI

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SUMMARY

Dedicated Computer Engineering graduate with hands-on co-op experience in software development, IT service management, and electronic hardware design. Demonstrates a strong ability to enhance operational efficiencies and implement user-centric technological solutions. Skilled in a variety of programming languages and tools, eager to leverage technical expertise in a challenging role.

EDUCATION

University of Ottawa **Graduation Date: March 2024**
Bachelor of Applied Science: Computer Engineering with Co-op Program *Ottawa, ON*

EXPERIENCE

Junior IT Analyst Co-op **Sept 2022 – Dec 2022**
Innovation Science and Economic Development Canada *Ottawa, ON*

- Designed and enhanced client-focused IT services, successfully reducing client service times by 15% through optimized report generation and metric analysis.
- Authored and revised Knowledge Base articles, boosting IT Service Desk efficiency by 20% through improved accessibility and user guidance.

Analytical Lab Managment Co-op **Jan 2022 – April 2022**
National Research Council Canada (NRC) *Ottawa, ON*

- Actively contributed to strategic meetings and spearheaded the development of a lab management strategy, improving lab operational efficiency by 25%.
- Implemented a Lab Management Platform and conducted training for 10+ users, resulting in a 30% increase in compliance with documented rules and procedures.

Software Developer Co-op **July 2021 – Oct 2021**
University of Ottawa *Ottawa, ON*

- Converted legal contracts into Symboleo specifications and developed LTL/CTL properties, enhancing data protection measures by integrating automated compliance checks.
- Supported a team of developers in testing and refining software specifications, which decreased bug rates by 40% prior to deployment.

PROJECTS

Emergency Urban Search and Rescue Robot | *Capstone Project* **Sept 2023 – Dec 2023**

- Engineered an autonomous robot, which improved target location accuracy by 70% in simulated disaster environments using a Raspberry Pi 4 and sensor array.
- Developed a web-based interface with React and Node.js, effectively managing control and data flow; integrated AWS to scale cloud services seamlessly.

FPGA UART | *Digital Systems Course Project* **Sept 2021 – Dec 2021**

- Designed and simulated a traffic light controller using VHDL and Finite State Machine (FSM), which reduced signal processing errors by 20%.
- Built and tested a pre-project prototype circuit for CMOS to RS-232 signal conversion, streamlining communication efficiency in subsequent FPGA deployments.

TECHNICAL SKILLS & QUALIFICATIONS

Languages: Java, Python, C. C++, Assembly, VHDL, Verilog,JavaScript, HTML, CSS SQL, PostgreSQL
Frameworks & Libraries: React, Node.js, Firebase, Bootstrap, JUnit
Developer Tools: Android Studio, Visual Studio Code, Quartus II, Git, Bitbucket, Trello, Wrike
Simulation & Design Software: MATLAB, Multisim, Simulink
Hardware & Electronics: FPGA, Microcontroller, Oscilloscope, Waveform Function Generators
Security Clearance: Confidential Level Security Clearance, LEVEL II SECRET (2022)