Vassily Petrousevitch

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Education

University of British Columbia — Sep 2020 - Present
Computer Engineering Student — *Vancouver, BC*
Expected Graduation: April 2025

Work/Volunteering Experience

Co-op Web Developer — May 2023 - present
UBC IT - Web Services — *Vancouver, BC*

- Maintained and updated UBC-owned websites as part of a team of experienced developers
- Developed an automated end-to-end test suite used to error-proof UBC websites
- Communicated with clients to gather info on bug fixes, provide quotes, and fulfill requests

Block Piler — May 2021 - Aug 2022
Star Lumber — *Mission, BC*

Filing Assistant — Mar 2017 - Sep 2019
Old House Law & Notary — *Courtenay, BC*

Projects

Twinstick Space Shooter | *C#, MonoGame*

- Conceptualized, designed, and created a desktop video game using C# and the MonoGame framework
- Implemented essential features such as collision detection, character movement, and health
- Rigorously tested parameters to fine-tune the desired player experience

MIPS OS Design | *C, x86 Assembly*

- Implemented core features for a MIPS OS code base, such as synchronicity and file management
- Managed concurrency issues, memory demands, caching, and switching between kernel and user mode safely
- Managed code revisions and merging conflicts through GitHub version control

Online Chatroom Website | *HTML/CSS, JavaScript, MongoDB*

- Implemented a responsive, interactive website using HTML and JavaScript where users could live message one another through chat rooms
- Developed a server to provide data persistence (chat rooms keep their messages even after server reset) using MongoDB and REST endpoints
- Implemented an authentication mechanism for users using session cookies to prevent unauthorized access

"Olympics" Relational Database | *PHP, SQL (Oracle), HTML*

- Created a relational database representing information about the Olympics using Oracle SQL
- Provided a frontend interface to interact with the database for users using HTML
- Connected the frontend interface with the server using PHP and SQL queries to satisfy the user's requests

IoT Surveillance Robot | *Python, Raspberry Pi, TensorFlow*

- Implemented object detection through a USB camera using a pre-trained TensorFlow model and OpenCV, achieving a confidence rate of up to 95% for correct objects
- Outputted the live camera video stream onto a website using Flask
- Provided frontend interface to control the surveillance robot and view the livestream using a website made with Django and React

Technical Skills

Languages: C/C#/C++, Java, Python, SQL, JavaScript, HTML & CSS, Verilog
Frameworks: Drupal, React, Node.js, TensorFlow, Oracle DBMS, MongoDB
Other: Linux, Git/GitHub, Vim, x86 & ARM assembly, Arduino/Raspberry Pi, ModelSim, Quartus