Alex Vazquez

http://alexvazquez.xyz

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EDUCATION

The University of British Columbia — Vancouver, CA
Bachelor of Electrical and Computer Engineering; — *Aug. 2017 – Present.*

Perimeter Institute of Theoretical Physics — Waterloo, CA
Quantum World and Quantum Nature Certification; — *Nov. 2016 – January. 2017*

West Vancouver Secondary School — West Vancouver, CA
Completion of the International baccalaureate; — *Aug. 2014 – June. 2017*

EXPERIENCE

INETCO Systems ltd. — Burnaby, CA
Junior Software Engineer — *May 2018 - September 2018*

Using the Agile development methodology did the following:

- Successfully migrated batch automated build testing scripts to Python, increasing its configurability and improving its functionality.
- Authored a Slack-Bot in order to control, automate and show results of builds testing, reducing the testing time.
- Developed analytical custom dashboards using Java, SQL and JavaScript on Jaspersoft Studio for NCR, which output data in half the time previous dashboards did.
- Implemented the installers ability to automatically detect host OS environment, simplifying the installation process.
- Created an Impala testing server on Redhat, using unix and SQL.

UBC Orbit — UBC, CA
Senior Controls Engineer — *Aug 2017 - Present*

Senior Member of the UBC Engineering design team UBC Orbit, with the objective to build a fully automated satellite. Part of the Attitude Determination and Control Systems(ADCS) division, where I:

- Implemented the Kalman Filter system in C++.
- Implemented a detumbling algorithm using a b-dot and PID controller for the control of U-SAT.
- Successfully created and tested code to obtain and analyze output from IMU connected to Micro-controllers.
- Developed and tested the SunSensor micro-controller processor.
- Designed and fabricated custom PCBs for the ADCS division and its components.

Bowman Technologies — Vancouver, CA
Software Engineering Intern — *December 2016 - August 2017*

Worked as a Junior Software Engineer Intern for Bowman Technologies;

- Created Excel Sheets using Js to illustrate clients their expenditure to performance ratio using the products offered by Bowman Technologies.
- Performed data entry tasks were I gained knowledge in advanced excel applications.
- Optimized website, in order to facilitate maintenance and reduce loading time.

PROJECTS

- **Alexvazquez.xyz:** Personal Online Portfolio to provide employers a more in-depth interactive CV .
- **Small Steps:** Cross-Platform app to monitor heart-rate, location, log therapy and display trends.
- **Jenkins-Bot:** Slack-Bot to control, automate and receive output remotely from Jenkins.
- **AI-larm:** Machine Learning python app using SK-Learn to predict wake up time and suggest optimal bedtime.

TECHNICAL SKILLS

- **Programming**: C-C++, Python, HTML5 + CSS3, MatLab, SQL, LaTeX

- **Software**: Minerva (By: CERN), Solidworks, Altium, Excel, ModelSim, ANSYS, JasperSoft

- **Languages**: English, Spanish, French and beginner Italian

- **Methodologies**: Agile, Waterfall

AWARDS

UBC Physics Olympics — UBC, CA
1st place overall in the UBC high school physics olympics. — *Dec. 2016.*

International Baccalaureate — West Vancouver, CA
Award and certificate for Completion of IB Curriculum — *June. 2017*