John Harvey
Bachelor's of Applied Science, Engineering Physics
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Summary

I am a graduate of UBC's Engineering Physics program interested in a career in software development/engineering. I'm passionate about effective communication, both with clients and internally, and documentation of processes. I'm interested in automation and the open-source rapid prototyping (3D printers, CNC mills) community.

Work Experience

Shaw Communications **August 2017-February 2018**
eCare Technical Support Representative

- Provided technical support for TV and internet over chat, achieving a customer satisfaction rate of 93% and an average chat time of 13 minutes.
- Troubleshot issues including but not limited to third-party email clients, internet connectivity on desktop/laptop computers, phones, tablets, and smart devices, modem/router setup, PVR usage, as well as customer education as to device features.
- Wrote and maintained tickets detailing key points of issues for internal review and customer follow-up, escalating issues to the appropriate team when necessary.
- Consistently delivered quick service, having the fastest chat time in the department on multiple occasions, by combining a deep knowledge of internal documentation and a friendly tone which kept customers focused on a solution.

UBC Engineering **September 2016-April 2016**
Undergraduate Teaching Assistant

- Led weekly tutorial sections of up to 70 first-year students, covering topics including stakeholder analysis, the design process, prototyping, ethics, and effective teamwork.
- Ran drop-in computer aided drafting help sessions, providing assistance for users with a variety of skill levels in creating designs for parts in a manner which most effectively used features of the software.
- Marked 15+ written assignments per week quickly and accurately, providing actionable and specific feedback for students. Also marked midterm and final exams.

UBC Dairy Education and Research Centre **May 2015-August 2015**
Undergraduate Researcher

- Assessed the feasibility of automating toilet training in dairy cows using several techniques, including audio analysis and computer vision, given that research had shown that cows could be toilet trained.
- Wrote and documented software (C++ with OpenCV) to track multiple animals in real time within an enclosed area, given low-resolution security camera footage.
- Designed, sourced parts for, and constructed a video-capture device incorporating visible-spectrum and thermal cameras which streamed footage over an internet connection.
- Continued as capstone then personal project, September 2015-August 2016.

UBC Centre for Teaching, Learning, and Technology **May 2014-December 2014**
Learning Technology Co-op Student

- Maintained and contributed to the UBC Wiki, focusing on documentation providing step-by-step instructions for professors from all faculties interested in creating videos, podcasts, and other media to improve the learning experience of their students.
- Troubleshot, created content for, and managed several WordPress-based websites designed to deliver learning resources to students on the topics of digital identity, learning resources at UBC, and media creation.
- Helped run workshops introducing instructors to screen-capture, recording, presentation software, by demonstrating techniques and effective use of said software in front of large groups, and one-on-one.

Skills

- Programming languages: C++, MATLAB, Python, Java, C, Arduino, VHDL.
- Software techniques: object-oriented programming, computer vision, machine learning, software engineering/development, documentation and testing.
- Software: Visual Studio, Eclipse, Git/Github, SolidWorks, AutoCAD.
- Electronics: oscilloscopes, function generators, multimeters, power supplies, breadboarding/prototyping, soldering.

Technical Projects

Team Captain, UBC Rapid **September 2012-April 2017**

- Vetting and managing projects, coordinating with project leads, providing support/budget, and communicating with university administration.
- Writing funding proposals, managing team budget and resources (~$4500/year), and publicising team's progress and services offered.
- Sourcing, building, calibrating, and improving open-source 3D printers, filament extruders, and 3D scanners.
- Work on projects—retrofitting medical pick-and-place machine into a CNC mill, building 3D printers, pellet-to-filament extruders, and 3D scanners.
- Oversaw transition to a new, larger space previously used as storage, outfitted the room as a lab/workshop, and imposed organization on a space frequented by 20+ people working on many projects.

Education

Bachelor of Applied Science **September 2011-May 2018**
Engineering Physics, Electrical Option
University of British Columbia Credits earned: 214, Cumulative Average: 75%