# Application Package for Amazon Internship

### Presented to Dr Erika Paterson

### Brent Hanover

### 27573104

### English 301

### March 26, 2019

# Software Development Engineer Co-op - Fall 2019 (Canada)

Job ID: 803585 | AMZN CAN Fulfillment Svcs, ULC

### DESCRIPTION

Amazon Student Programs is looking for Software Development Engineering interns to join our development teams located in Amazon offices across Canada.

Note: By applying to this position, your application will be considered for locations we hire for in Canada: Vancouver, CA; Toronto, CA; & Winnipeg, CA.

We are looking for Amazon interns to join us for Fall 2019! Amazon interns have the opportunity to work alongside the industry’s brightest engineers who innovate everyday on behalf of our customers. Our interns and co-ops write real software and partner with a select group of experienced software development engineers, who both help and challenge them as they work on projects that matter to our customers.

As an intern, you will be matched to a manager and a mentor and given the opportunity to have direct impact on the evolution of Amazon's technologies as well as lead mission critical projects early in your career. Your design, code, and raw smarts will contribute to solving some of the most complex technical challenges in the areas of distributed systems, data mining, automation, optimization, scalability, and security- just to name a few.

In addition to an impactful project, you will have the opportunity to engage with Amazonians in both personal and professional development, expand your network, and take part in fun activities throughout the summer. No matter the location of your internship, we give you the tools to own your summer and learn in a real world setting. Many of our technologies overlap—you would be hard pressed to find a team that is not using Amazon Web Services (AWS), touching the catalogue, or iterating services to better personalize for customers.

Below is a small snapshot of potential work experience you may gain during your internship at Amazon:

· Collaborate with experienced cross-disciplinary Amazonians to conceive, design, and bring to market innovative devices and services
· Design and build innovative technologies in a large distributed computing environment and help lead fundamental changes in the industry
· Create solutions to run predictions on distributed systems with exposure to cutting edge technologies at incredible scale and speed
· Build distributed storage, index, and query systems that are scalable, fault-tolerant, low cost, and easy to manage and use

Amazon internships are full-time (40 hours/week) for 12-16 consecutive weeks with start dates between September 2019 through December 2019. Applicants should have at a minimum one quarter/semester remaining after their internship concludes.

Amazon is a place where builders build. Will you build with us?

### BASIC QUALIFICATIONS

· Currently enrolled in a Bachelor’s or Master’s degree program in Computer Science, Computer Engineering, or related technical discipline with a focus on software development
· Experience coding in Java, C, or C++

### PREFERRED QUALIFICATIONS

· Enrolled in a Bachelor’s Degree in Computer Science
· Strong understanding of object-oriented design, data structures, and algorithms
· Proficient in one or more object-orientated programming languages (Java, C, C++, etc.)
· Ability to effectively articulate technical challenges and solutions
· Adept at handling ambiguous or undefined challenges through strong problem solving skills and effective communication

Amazon is an Equal Opportunity-Affirmative Action Employer – Minority / Women / Disability / Veteran / Gender Identity / Sexual Orientation

Pursuant to the San Francisco Fair Chance Ordinance, we will consider for employment qualified applicants with arrest and conviction records.

Citation: “Amazon jobs.” *Amazon, Seattle*. N.p., n.d. Web. 26 Mar. 2019.

Brent Hanover

Vancouver, BC | 604 722 6014 | brenthanover@gmail.com | [LinkedIn](https://www.linkedin.com/in/brent-hanover-92748153/) | P Eng eligible

## SUMMARY

* Analytical, self-motivated, hands-on, detail-oriented, efficiency driven, problem solver
* New product development, mechanical design, tolerance stacking, project management, process standardization
* Lean manufacturing: 6S, DFMEA/PFMEA, Kaizen, Kanban, visual management, TPM, inventory reduction, one piece flow

## EDUCATION

B ASC: MECHANICAL ENGINEERING | 2010 – 2015 | UNIVERSITY OF BRITISH COLUMBIA

B SC: COMPUTER SCIENCE | 2018 – PRESENT | UNIVERSITY OF BRITISH COLUMBIA

## SKILLS & ABILITIES

#### Mechanical Design

* Rapid, reproducible design of parts, assemblies, drawings
* Waste elimination, problem solving,
* Design for fabrication, CNC, 3D-Printing, sheet metal
* Solidworks, AutoCAD, MATLAB, Adept, ERP systems

#### Software

* Java, C, Python, React, Office
* Maintaining 4.0 GPA
* Top 1% of class in Introduction to Computer Science
* Excellent code cleanliness and readability

Software Projects

#### Tetris

* Remake of the classic game in Java using JFrame
* Full game functionality, levels, themes, high score tracking, save game state to disk and load

#### BCS Hackathon – Haven

* Web application for at risk and homeless persons to quickly get information about shelters, safe injection sites, food banks
* Incorporated Firebase database to track population levels at homeless shelters
* Programmed NFC tags to direct users to the web application

#### Flappy Bird

* Remake of Flappy Bird, a tap-to-play game where the user dodges pipes as they fly
* Programmed in Java, GUI created in JFrame, can save game state to disk and load

Work Experience

#### Manufacturing Engineer | Philips Lighting | September 2015 - Present

* Lead new product introduction to the factory
* Lead training sessions of 4-12 people in lean training sessions and new assembly processes
* Mechanical design of jigs, fixtures, assembly lines, value streams, fabrication cells
* Cost savings initiatives exceeding $170k/year
* Reduced cardboard waste by over 1 000 000ft2/year

#### Engineering Laboratory Technician | UBC Earthquake Facility | September 2013 – august 2015

* Set up and performed destructive earthquake shake-table simulations on masonry walls with varying support structures
* Installed successful early warning earthquake sensors in various schools across the lower mainland and Vancouver Island
* Performed destructive yield-analysis tests on aluminum trusses, metal strapping, concrete forms, and masonry walls

To Amazon’s Hiring Manager,

My name is Brent Hanover and I am a student pursuing my second degree in Computer Science at UBC. I graduated in 2015 with a degree in Mechanical engineering, and since then have been working at Philips as a manufacturing engineer. At Philips I worked primarily in process standardization, waste elimination, and efficiency maximization, all of which translate directly to software construction. The position that you have described for the software development intern strongly mirrors my experience and qualifications and I am highly interested in joining the team at Amazon.

I have exceled in all software courses that I have taken so far, maintaining a 4.0 GPA and earning personal recommendations from professors. I am very proficient in Java and have worked in Python and C as far back as 2017. I am most interested in machine learning and AI and am planning on expanding my knowledge in future semesters by taking multiple courses in statistics. Some projects that I have been a part of include:

BCS Hackathon 2019 - Haven

* Created a web app to give at-risk people quick information on nearby shelters and injection sites
* Used firebase to keep track of homeless populations at local shelters
* Programmed NFC tags to load the web application

Tetris – Java

* Remade the classic Tetris in Java with full functionality, adding levels, sound effects, and themes
* Created save states using JSON data, can save files to disk and load state

Flappy Bird - Java

* Recreated Flappy Bird, the 2013 hit game where the user makes a bird fly by tapping the screen
* Saves and loads states and high scores by saving game data to a text file

At Philips, I focused my abilities in providing solutions for production issues, establishing manufacturing processes, and eliminating waste. I am the lead engineer for new product introduction, ensuring that new products have a smooth transition to becoming standard production products. Notable achievements include leading training sessions for 4-12 employees, executing cost saving initiatives totaling over $170k/year, and reducing cardboard waste by over a million square feet per year.

I firmly believe that my skillset and experience will be an excellent fit with Amazon’s team and will result in creating significant value with all parties involved. I look forward to discussing my qualifications with you further during a personal interview.

Sincerely,

Brent Hanover

**To:** Jim Moloney, Mechanical Engineering Manager

**From:** Brent Hanover

**Date:** March 26, 2019

**Subject:** Request for Reference Letter

Hi Jim,

I hope that this letter finds you well. I am in the middle of my second degree in Computer Science and am applying for several highly-contested internship positions. As my manager at Philips, I’m hoping that you would be able to write me a letter of reference. This would greatly improve my chances of making my application stand out from the rest.

Although you were the mechanical engineering manager and mentored my skills in mechanical and process design, many of the skills are directly transferable. All of the time and project management, waste elimination, and work standardization that I was taught will directly benefit me at the internship I am applying for.

I have attached a recent resume below. If you can supply me with a letter of reference, please let me know by next Friday, April 5, as applications for internships are already starting to appear online. If you have any questions, please feel free to email me at brenthanover@gmail.com. Thank you for your time.

Regards,

Brent Hanover

**To:** Chris Campbell, R&D Engineering manager

**From:** Brent Hanover

**Date:** March 26, 2019

**Subject:** Request for Reference Letter

Hi Chris,

I hope that this letter finds you well. I am in the middle of my second degree in Computer Science and am applying for several highly-contested internship positions. As my manager at Philips, I’m hoping that you would be able to write me a letter of reference. This would greatly improve my chances of making my application stand out from the rest.

Although you were the research and development engineering manager and mentored my skills in mechanical and process design, many of the skills are directly transferable. All of the time and project management, waste elimination, and work standardization that I was taught will directly benefit me at the internship I am applying for.

I have attached a recent resume below. If you can supply me with a letter of reference, please let me know by next Friday, April 5, as applications for internships are already starting to appear online. If you have any questions, please feel free to email me at brenthanover@gmail.com. Thank you for your time.

Regards,

Brent Hanover

**To:** Harald Schrempp, Laboratory Manager

**From:** Brent Hanover

**Date:** March 26, 2019

**Subject:** Request for Reference Letter

Hi Jim,

I hope that this letter finds you well. I am in the middle of my second degree in Computer Science and am applying for several highly-contested internship positions. As my supervisor at the UBC Engineering Earthquake Research Facility, I’m hoping that you would be able to write me a letter of reference. This would greatly improve my chances of making my application stand out from the rest.

Although you were the laboratory manager and mentored my skills in mechanical design and experiment testing, many of the skills are directly transferable. All of the time and project management, waste elimination, and work standardization that I was taught will directly benefit me at the internship I am applying for.

I have attached a recent resume below. If you can supply me with a letter of reference, please let me know by next Friday, April 5, as applications for internships are already starting to appear online. If you have any questions, please feel free to email me at brenthanover@gmail.com. Thank you for your time.

Regards,

Brent Hanover