

Brad Duvall

A materials and process engineer with 6 years of professional experience and a graduate certificate in software design is looking for a Software Engineer position in the Seattle area

Technical Qualifications

- Graduate Certificate in Software Design and Development and Bachelor of Science in Material Science and Engineering.
- Completed projects in C++, Python, Java, JavaScript and VueJS. Used Tkinter, SQLite, PostgreSQL, and Flask to create applications in Python.
- As Process Engineer worked in multi-disciplinary teams in Aerospace manufacturing, tested and implemented new polymers to ensure customer satisfaction and to reduce manufacturing cost. As Research Engineer in Aerospace manufacturing, implemented new metal alloys and new manufacturing methodologies.

Software Projects

- **Brownie Points WebApp** [Link](#) (2018 - 2019)
Wrote an javascript web app game that implements completing user defined daily, weekly and monthly goals for experience points and levels to obtain user defined rewards. Currently updating the app to implement Vue framework and NoSQL using Firebase.
- **Shadow-Boxing WebApp** [Link](#) (2018)
Created a web app for vocalizing Thai boxing combinations. Used Bootstrap, CSS, HTML and JavaScript to create random combinations and play audio files to voice the combinations. Users have options to adjust timer length, combination length, frequency, and include pre-created combinations. Requested and incorporated feedback from three early users including a lead instructor.
- **Personal Website** [Link](#) (2018)
Created a website using Bootstrap, CSS, HTML and JavaScript. Updated the website using Vue framework and hosted the website using Git-Pages.

Experience

University of Washington

Bothell, WA

[2017 - 2018]

Graduate Certificate Student

- OOP Group Project: Worked with a partner to design and develop an inventory tracking system using BST for quick sorting and storage of inventory. Used hash tables to store and quickly access customer data. Designed a class hierarchy to make the inventory extensible for many media types and genres. Used a manager class to manipulate inventory and customer objects.
- Multithreading, Sleeping Barber Problem: Extended a single process, single thread sleeping barber problem into a multiple thread, multiple barber problem in C++. Used pthreads and asynchronous communication to implement multiple barbers with no memory leaks and no deadlocks.

- B/E Aerospace ALCI** Everett, WA [2015 - 2016]
Materials and Process Engineer

- Exotic Metals Forming Company** Kent, WA [2011 - 2015]
Research Engineer I, II

- [illegible]

- United States Navy** Everett, WA [2000 - 2006]
Nuclear Machinist Mate PO2 (E-5)

- ## Education

- University of Washington** Seattle, WA [2009 - 2011]
- Bachelor of Science Material Science and Engineering

- North Seattle Community College** Seattle, WA [2006 - 2009]
- Associate of Science