Dat Do

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EDUCATION

B.S. in Computer Science | Sep 2019 – Dec 2021
University of Washington | Seattle, WA
Direct Admit to Major | GPA: 3.61
2019-2020 Courses: Data Structures & Parallelism, Systems Programming (C, C++), Foundations of Computing, and more.

Associate of Arts & Sciences | Sep 2017 – Jun 2019
Bellevue College | Bellevue, WA
Academic Concentration in Mathematics
Completed Courses: Calculus I-IV, Linear Algebra, Fundamentals of Computer Science I-II, and more.

EXPERIENCE

High School Software Engineering Intern **Microsoft, Data + AI – Visual Studio** Jun 2019 – Sep 2019

- Worked on the Data + AI Team under Visual Studio Dev Tools. Launched and maintained a machine learning contest platform, empowering developers and data scientists alike to cooperate and solve problems through building models.
- Engineered CI/CD to automate our team's process of going from new commits in the source code to live production, eliminating upwards to 90% of the initial manual overhead involving dev environment setup and testing.
- Learned to utilize Azure cloud services (DevOps, Pipelines, Resources, etc.), leverage open-source, and commit quality code.

IT Service Desk Agent **Bellevue College IT Services** Mar 2019 – Jun 2019

- Assisted students, faculty, and administrative staff in resolving various technology-related problems including but not limited to: remote access services, Canvas Learning Management System, and software/hardware troubleshooting.

Treasurer **Bellevue College Student Programs** Sep 2018 – Jan 2019

- Held responsibility for the overall administration of the Associated Student Government budget with over $500,000 from four different budget accounts, enabling clubs/programs to operate and grow in and outside of the college.
- Led meetings as Chair of the S&A Fee Committee to review/approve funding requests based on needs and available budget.

Machine Learning Intern **Port of Seattle & Sea-Tac Airport** Jul 2018 – Sep 2018

- Actively contributed to the Air Cargo Computer Vision prototype in implementing a COCO-trained model over cargo and aircraft images at Sea-Tac Airport. Security cameras are then implemented to detect the cargo and aircrafts on the airfield, ensuring proper operations.
- Defined and implemented a Facial Detection and Recognition system to further enhance skills/knowledge of computer vision, a Convolutional Neural Network to classify handwritten digits, and an NLTK model to perform text sentiment analysis on Twitter tweets. Primarily utilized Python, PyTorch, OpenCV, amongst other data science libraries.

PROJECTS – More at *datddo.com*

Dynamic Memory Allocator | Collaborative Dec 2019

- Wrote a dynamic storage allocator for C programs (i.e. malloc and free routines) using a doubly-linked explicit free list.
- Implemented primarily in C while examining how algorithm choice impacts tradeoffs between utilization and throughput.

Python Code Completion Model | Microsoft OneWeek Hackathon Jul 2019

- Built a contest-winning Seq2Seq Frequency Model to predict Python code based on 2,000 top-starred GitHub repos.
- Implemented primarily in Python utilizing a Prediction Tree, Inverted Index, and Lookup Table.

PathFinding Visualization | Personal Mar 2019

- Find the shortest path from a 'starting' cell to an 'exit' cell using the Breadth-First Search (BFS) algorithm.
- Implemented with JavaScript, HTML/CSS, and jQuery. Check it out at *datddo.com/pathfind.php*

Facial Detection & Recognition | Collaborative Jul 2018

- Computer vision model that detects and recognizes real-life human faces. A neat implementation to this is that it collects and trains on the data almost instantaneously.
- Implemented primarily with Python and OpenCV.

Wizard Top-Down Shooting Game | Personal Jun 2018

- Created a simple 2D game as a starting step towards programming.
- Implemented primarily in Java following OOP principles and utilizing Swing to create an interactive GUI.