

# Trevor Byko

TrevorDByko@gmail.com  
Bykot1.github.io  
503-756-0790

## Languages

C / C++  
Python  
Java

## Graphics

OpenGL  
OpenCL  
Blender

## Web Development

HTML / CSS  
JavaScript  
NodeJS  
MySQL / SQLite

## Tools

Ansible  
Docker

## Education

Portland Community College  
Oregon State University

Associates Transfer Degree  
B.S. Computer Science

*(Capstone Project: Hinsdale Wave Research Lab Multi-Platform Control Interface)*

## Coursework

Computer Networking  
Machine Learning  
Graphics Shaders

Mobile Application Development  
Parallel Programming

Computer Architecture  
System Administration  
Artificial Intelligence

## Programming Highlights

- A Beer a Day: An Android mobile application making use of the RecyclerView framework, ViewModel Architecture and Retrofit for internet API requests. The app allows users to locate nearby breweries, and provides relevant information, such as available beers, their ingredients and ABV. SQLite is used to store previous API queries as well as local data. It uses SQLite to store previous search results.
- Predicting Income from Lazy Learning: Python3 program that takes in an “n x d” matrix of normalized and binarized data values. With each column representing attributes of a person, continuous values are normalized and categorical variables are encoded in binary sequences. Using the k-Nearest Neighbor algorithm on a set of training data, the program performs 4-fold cross validation to find an optimal value of “k”. Built using NumPy for efficiency.
- *Capstone Project: Hinsdale Wave Research Lab Multi-Platform Control Interface:* We delivered a multi-platform web & Android application after being tasked with adding programmatic intelligence for filling the facilities. The applications allowed users to see current and historical water levels at each facility, as well as the streaming of live video feeds from around the lab. Additionally, users had the ability to fill a pool to a specific depth in the future using a “set and forget” function. The web app front end is built using HTML/CSS and with the Bootstrap framework. JavaScript adds additional functionality for interfacing with a central database. The database uses MySQL and stores water depth information, as well as future target depths and login information. The interface with lab hardware is handled using Python2.

## Work Experience

Retail Sales

Computer Technical Support

Customer Service

Computer Repair