HANS C. GUNDLACH

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 Personal Website (link) hansgundlach.github (link)

Education

- UC Berkeley, intended majors: Mathematics, GPA 3.78, 2017-
- Lakeside High School, Seattle, 2013-2017

Projects/Work

• Lakeside School Attendance System

— 2017: Initiated, implemented, and sold automatic Wifi attendance system after identifying problem with previous slow manual sign in system. I built the system using Java, JFrame, SwingWorker, and SMB. I worked with administration to design the UI to their specifications. Lakeside High School bought the system and it is currently in use keeping highly-accurate attendance information on 600+ students.

• MazeVR - Android-Unity Development

 2016: Designed and developed VR maze game for Android using Unity and automatic mesh generation libraries. App was selected for VR exhibit at Seattle Mini-Maker Fair. App has been downloaded over 300 times. App is available for free along with game videos at: Google Play (link)

Paid Bioinformatics Intern at Fred Hutchinson Cancer Research Center

- Summer 2017: Researched and designed quantitative metrics to find the ancestry of metaplastic tissue using Illumina 450k methylation data and R.
- Summer 2016: Analyzed cancer sample data set (200 samples, 450k methylation values per sample) and and built a system for visualizing data sets using R.

Other Projects

- 2015-2016: Completed independent study in machine learning by implementing: neural nets including gradient descent, and back propagation algorithms in Java. Implemented SVM in python and requested college admission data from high school. SVM successfully predicted acceptance or rejection to the University of Washington for all interviewed (5 people).
- 2015: Initiated and implemented the first ever full-scale web Latin conjugation tester to help my Latin classroom with test prep. Developed website to conjugate over 1,000 Latin verbs in 25 conjugations using WAMP stack. Website helped over 1500 unique students during May 2015.

Skills

Tools and Languages

- C++, Arduino, Java, Git, python, Haskell, R, Kali Linux, WAMP

Achievements and Activities

- Lakeside School Computer Science Club co-captain
- Lead software engineer for Vex Robotics club for 3 years. Oversaw teaching new members RobotC and Git.
- Hobbies: Oil Painting, Drawing, Cello, Singing
- Art (link) selected for 20 under 20 exhibit at Bellevue Art Museum