2400 Durant Avenue Spens Black #310 Berkeley, CA 94720 https://gkliger.github.io gavinkliger@gmail.com (949) 441-8800

EDUCATION

University of California, Berkeley, Berkeley, CA

Bachelor of Science, Electrical Engineering and Computer Science, May 2021

GPA: 3.84

Tesoro High School, Las Flores, CA

Diploma, June 2017

GPA: 4.0 (unweighted); National Merit Finalist, National Merit Scholar, National AP Scholar, Eagle Scout

RELEVANT COURSEWORK

- Fall 2017: Structure and Interpretation of Computer Programs (CS 61A), Designing Information Devices and Systems I (EE 16A), Multivariable Calculus (Math 53)
- Spring 2018: Data Structures (CS 61B), Designing Information Devices and Systems II (EE 16B)

LANGUAGES

Python, Java, SQL, JavaScript, HTML5, CSS3, Scheme, Go

EXPERIENCE

Berkeley NetSys Lab, Apr 15, 2018 – Present

I work part time at the NetSys Lab, where I am currently working on the "Verified Triggers" project. We are developing a tool to determine whether system invariants will lead distributed systems to reach a steady state. To do this we use state of the art techniques to predict and model system behavior.

BrainStorm STEM Education, June 12 – August 4, 2017

I worked full time and co-taught four 3-week courses at public schools in Irvine, CA. I interacted with parents and students on a daily basis, and taught basic block programming, 3D modeling, Arduino, and robotics.

COSMOS (California State Summer School for Math and Science), July 10 – August 5, 2016

I participated on a research team at UC Irvine with three other high school students under Professor Martin Jaroszewicz. We designed, developed, and demonstrated an iOS virtual museum application incorporating 3D sound using Swift 2.2.

PROJECTS (For more information, see my website)

- Used Java to develop a random world generation algorithm which I used to create a 2D game. The algorithm ensured that all parts of the world were reachable for the player.
- Used Python to implement a fully functional interpreter for the Scheme programming language. Ensured that evaluation was properly tail recursive.
- Implemented an application to create a Voronoi diagram visualization of nearby restaurants and their ratings using the Yelp academic dataset in Python. Application used machine learning techniques to predict restaurant ratings.