KWK

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CONTACT

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EDUCATION

UC BERKELEY

2018-2022
B.A. Computer Science
B.A. Economics
GPA 3.64

COURSEWORK

- Immersive Computing & Virtual Reality
- Computer Graphics & Imaging
- Data Structures
- Efficient Algorithms & Intractable Problems
- Computer Security
- Discrete Math & Probability Theory
- Linear Algebra
- Computer Architecture & Machine Structures

LANGUAGES

- Javascript *(React, Express)*
- Python *(Flask)*
- Java
- Ruby *(Ruby on Rails)*
- HTML/CSS
- C/C++
- SQL
- Go
- Rust

AWARDS

Gold Presidential Service Award
2018
sfcode
1st place / 2017
American Computer Science League All-Star Competition
4th place / 2017

EXPERIENCE

BERKELEY INSTITUTE OF DESIGN

Research Intern / May 2021 - August 2021

- Refined an automatic style and animation transfer app in React by replacing the canvas library with PaperJS and implementing new features (advised by Professor Björn Hartmann and Jeremy Warner)

VERIZON MEDIA

Software Engineer Intern / June 2020 - August 2020

- Implemented video seeking using React on Fluxible and Java backend to accelerate moderations' ability to verify flagged content on Verizon Media's services (Yahoo Mail, Engadget, etc.)
- Explored wider file support using scalable microservices that transcode with FFMPEG on demand

BLUEPRINT, TECHNOLOGY FOR NON-PROFITS

President / May 2021 - [Current]

- Heading an organization of ~50 students to ensure the smooth operation of 4 project teams developing web or mobile apps for 4 nonprofits and other core duties such as recruitment, member happiness, and logistical paperwork to foster an environment focused on tech for social good
- Establishing an overarching organization of all the Blueprint chapters to help facilitate collaboration

Project Manager / June 2020 - December 2020 • *calblueprint.org/projects/nbjc*

- Led a team of five to build a website that will serve as a hub for people to search for local organizations dedicated to helping Black LGBTQ+ communities in partnership with NBJC
- Cold emailed 500+ potential non-profits to partner with in the coming academic year

Full Stack Web Developer / September 2018 - December 2019

- Worked pro bono on a full stack web dev team for The Arctic Institute, a research organization focused on the Arctic, by creating a matchmaking platform to connect volunteers and coastal communities in need with React and Ruby on Rails • calblueprint.org/projects/risingtides
- Developed a dashboard to help facilitate participant management for Unloop, a non-profit organization working to teach software development for people with criminal records, with React and Ruby on Rails • calblueprint.org/projects/unloop

FOUNTAIN

Software Engineer Intern / May 2019 - August 2019

- Simplified application procedure for users applying through Fountain's job portal by building a mobile-first web application that reuses existing user-entered info with React and Express
- Wrote APIs on monolith application built on Ruby on Rails to bring Premium/Enterprise product functionality to the cheaper Pro product, expanding features for franchise clients

UC BERKELEY - RAILS DECAL

Facilitator & Instructor / August 2019 - December 2019

- Taught a class of 25 students the core concepts of Ruby on Rails (Ruby lang, fundamentals of the web, APIs, webhooks) in 12 weeks through lectures, labs, homeworks, and projects
- Contributed to and updated guides on course material to provide during self hosted office hours

PROJECTS

PROTOTYPE VR

Research - Figma Plugin & Unity / October 2020 - May 2021 • *kwfk.dev/prototype-vr/*

- Created a workflow to easily build smart device prototypes that are testable in virtual reality where people can create user interfaces in Figma and export it to Unity to put on 3D models with a screen

FLUID SIMULATION

C++ Application / May 2020 • *kwfk.dev/184-final-project*

- Programmed a fluid simulator using particle-based positioning from Macklin and Müller's "Position Based Fluids" paper, adding viscocity and rendering the particles with GL Shader

2-D WORLD EXPLORATION GAME

Java Application / April 2019

- Built a game that randomly generates a 2-D world using a manually entered seed where a character can change character design and move in rooms and hallways with limited visibility