Vanessa **Lin**

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Edu**cation**

University of California, Berkeley *Berkeley, CA*

B.A. Computer Science ‖ Cumulative GPA: 3.73/4.00 *August 2017 - May 2021*

- Coursework: Structure and Interpretation of Computer Programs, Data Structures, Designing Information Devices and Systems I, Designing Information Devices and Systems II, Introduction to Entrepreneurship, Discrete Mathematics and Probability, Linear Algebra, Artificial Intelligence, Computer Architecture

Exp**erience**

Sandia National Laboratories *Livermore, CA*

Software Developer Intern *June 2018 - PRESENT*

- Added capabilities to Capabilities Development Framework (a Web GIS App) for the Department of Homeland Security, using OpenLayers, GeoServer, PostgreSQL, JavaScript, and PHP
- Developed a Python script to convert forms in GIFT format to HTML forms
- Implemented shell scripts to convert 100+ files in DocuWiki syntax to HTML
- Incorporated live data-streaming with temperature data, using OpenWeatherMap's API

RISELab: Real-time Intelligent Secure Explainable *Berkeley, CA*

Undergraduate Researcher | Electrical Engineering and Computer Science Dept *February 2018 - PRESENT*

- Worked on the E-mission project with Professor Randy Katz and K.Shankari, PhD candidate
- Designed and implemented a study in looking at normative behavioral patterns to promote sustainable transportation habits around the campus and the city
- Recruited a dataset of approximately 30 people to participate in the study as a pilot and currently working with the Bay Area Bike Coalition to conduct a larger study

Peac Lab: Performance and Energy Aware Computing Laboratory *Boston, MA*

Research Intern | BU Electrical and Computer Engineering Dept *July- August 2016*

- Looked for ways to improve the quality of record-and-replay devices with Professor Ayse K. Coskun, Matthias Büchler, PhD, and Cyril Saade
- Evaluated a computer program's (RERAN) playback capabilities under different conditions through over 50 mobile applications
- Focus on understanding the issues that cause replay tools to suffer from issues that hinder their ability in replaying touch-screen actions
- Built an Android application using Android Studio as a proof of concept to this study

Secondary Student Training Program: University of Iowa *Iowa, IA*

Research Intern *June - July 2015*

- Found early human pregnancy bio-markers of preeclampsia with Professor Mark Santillan, Professor Donna Santillan, and Sabrina Scroggins, PhD
- Investigated differences in urinary IL-6 protein levels in a cohort of pregnant women and if the IL-6 levels would be associated with poor obstetric outcomes

Pro**jects**

Gitlet

Private Repository *December 2017*

- Built a mini version of Git, the version control system, through Java and implemented commands, such as add, commit, merge, and etc.
- Able to add and remove files and save those files as blobs in the Gitlet-initialized repository

Crime over Spilt Milk

Private Repository *February 2018*

- Built a single player game on Unity through C # scripts where the user uses their mouse to navigate around the screen and click to shine light to find the criminal

Parkmark

github.com/valin1/live-scroll-view *March 2018*

- Developed a heat-map based application to provide real-time traffic for places like parking spaces, coffee shops, and restaurants using Google Map's API

Ski**lls and Qualifications**

Languages/Technologies

Python, Java, JavaScript, HTML, PHP, Git, Unity, Android Studio, OpenLayers