

# Sydney Lim

## MSCS @ UCSB

Last update: October 7, 2022

Up-to-date version of CV is available at

<https://sydneylim.github.io/resume>

Location

Fremont, CA

LinkedIn

[Sydney Lim](#)

GitHub

[sydneylim](#)

Email

scqlim@gmail.com

Fifth-year BSCE/MSCS student currently attending UC Santa Barbara. Aiming to leverage a proven knowledge of agile development, prototyping, product design, and R&D skills to land a software engineering internship.

C	••••	C++	••••	Java	••••	JavaScript	••••	Ruby on Rails	••••	Verilog	••••
React	••••	Express	••••	Heroku	••••	MongoDB	••••	MySQL	••••	PostgreSQL	••••
AWS	••••	Apache Bench	••••	GitHub	••••	Agile	••••	Jupyter	••••	MATLAB	••••
Unix/Linux	••••										

## Professional Experience

Jun 2022 - Sep 2022

### Software Engineering Intern

- Worked closely with a small team on full-stack software development using Ruby on Rails and React.js.
- Practiced agile software development skills and consistently participated in pair programming, standups, retrospectives, and backlog refinement.

Ruby on Rails

Full Stack Development

Agile Software Development

React.js

RubyMine

Aug 2021 - Sep 2021

### Data Loss Prevention (DLP) Intern

- Worked on a data loss prevention project with a goal to pinpoint sources of and minimize internal threats.
- Implemented robotic process automation (RPA) script to automate data extraction in Python.
- Utilized Microsoft Power BI, Tableau, and SQL to compile, cleanse, analyze, and present the data.

Python

Microsoft Power BI

Tableau

SQL

Robotic Process Automation (RPA)

Jun 2019 - Sep 2019

### Summer Intern

- Designed a database in MySQL/PostgreSQL. Utilized Microsoft Power BI to cleanse a user database.
- Designed and presented a prototype UI for the database in a pre-production environment.
- Researched natural language processing and data warehouses (Amazon AWS, Microsoft Azure, Google BigQuery).

MySQL

PostgreSQL

Microsoft Power BI

Prototyping

Product Design

## Projects

Sep 2021 - Mar 2022

## T.A.L.K., [GitHub Repo](#)

Senior CS Capstone Project, sponsored by Invoca

- Worked in a team of six to develop an Express web application deployed on Heroku to be used by salespeople.
- Our multi-cloud solution displays critical call information in a single view.
- Transcriptions generated by IBM Watson in near real-time retain important call details.
- We leverage NLP Cloud to generate concise call summaries so that salespeople can easily remember call contents.
- Keywords and the customer's sentiment are determined using Google Cloud's NLP API to guide sales follow-ups.
- We integrate Invoca's APIs service to retrieve call transcripts and store the data in a MongoDB database.
- We maintained well-documented code bases with version control, and touched base with mentors weekly and with team members daily.

Express JavaScript Heroku CSS MongoDB GitHub Agile Development

Mar 2021 - Jun 2021

## UCSB Courses Search, [Application](#)

Project for CMPSC 156: Advanced Applications Programming

- Worked with a team of ~20 people on this legacy project, a web application used to search for classes based on input criteria.
- Worked closely with a team of 5 people to focus on improving the search user interface.

React Heroku Spring Boot Auth0 GitHub Agile Development

Feb 2021 - Mar 2021

## Vision Test, [Project Page](#)

Project for ECE 153B: Sensor and Peripheral Interface Design

- Designed a "vision test" that simulates a tumbling E chart with symbols gradually decreasing in size.
- The E's are displayed on an 8x8 LED Matrix and a user inputs the direction that the E is facing using a Wii Nunchuk.
- A distance sensor will verify that the user is standing at an appropriate distance from the display.
- A terminal will display the user's vision score.
- Both the 8x8 LED Matrix and the Wii Nunchuk communicate with an STM32 microcontroller using I2C.
- The terminal communicates with an STM32 microcontroller using SPI.

C STM32 Microcontroller I2C SPI Peripherals Product Design

Jan 2021 - Feb 2021

## COVID-19 Survival Naive Bayes Classifier, [GitHub Repo](#)

Project for CMPSC 165A: Artificial Intelligence

- Designed a Naive Bayes Classifier in Python that determines whether a patient will survive from COVID-19 given their preconditions.
- Preprocessed and cleansed training and validation data sets using NumPy and SciPy.
- Built a model to determine which data fields were of greater importance.
- Placed second on the class leader board for classification accuracy and runtime.

Artificial Intelligence Machine Learning Python NumPy SciPy Data Processing Modeling

## Education

Expected Jun 2023

# UC Santa Barbara, Santa Barbara, CA

Master of Science in Computer Science

- GPA: 4.0/4.0
- Programs: 5-year B.S./M.S. Program in Computer Science
- Coursework in: Scalable Internet Services, Augmented Reality, Computer Graphics, Operating Systems, Runtime Systems
- Extracurricular Activities: Four Eyes Lab (Pursuing research in human-computer interaction, computer vision, and augmented reality), UCSB Badminton Club

Sep 2018 - Mar 2022

# UC Santa Barbara, Santa Barbara, CA

Bachelor of Science in Computer Engineering

- GPA: 3.7/4.0
- Programs: College of Engineering Honors Program, 5-year B.S./M.S Program in Computer Science
- Coursework in: Data Structures and Algorithms, Artificial Intelligence, Machine Learning, Computer Vision, Digital Image Processing, Operating Systems, Network Computing, Advanced Applications Programming, Object-Oriented Design, Sensor and Peripheral Interface Design
- Extracurricular Activities: Co-Founder and Vice President of UCSB Badminton Club (4 years)

Aug 2014 - Jun 2018

# American High School, Fremont, CA

High School Diploma

- UC Weighted GPA: 4.50 (Uncapped), 4.14 (Capped)
- SAT I: 1560/1600
- SAT II Chemistry: 800/800
- SAT II Math L2: 800/800
- Relevant AP classes: AP Chemistry, AP Physics C, AP Biology, AP Calculus BC, AP Computer Science (in Java), and AP English Language and Composition