

Nathan Chan

njchan@ucdavis.edu nathanjchan.com (650) 430-3780

From Redwood City, CA

Education

Bachelor of Science with Majors in Statistics and Computer Science

GPA 3.74

University of California at Davis

Graduation in June 2021

Minor in Political Science. Dean's Honor List. Active in policy-making in student government solving complex problems.

Skills

- Software: Fluent in Python and R. Proficient in SQL and Excel.
- Statistics: Linear and multivariate regression, predictive modeling, machine learning, probability, hypothesis testing, analysis of variance, feature extraction.
- Personal: has an eye for analysis, learns fast, thinks critically, solves problems in a principled and structured way, communicates well, and has a true passion for gaming.

Experience

Data Analyst

Davis, CA

UC Davis Center for Mind and Brain

May 2019 to Present

- Built a Python web-scraper software to collect data from government websites after learning website formats. Used numpy and pandas in Python to parse, clean, transform, and store data for analysis by researchers.
- Wrote code in R to parse, clean, transform, and store data for analysis by researchers. Studied the organization of hormone, heartbeat, sleep, and survey data for software implementation.
- Built Python pipeline in Linux to process brain imaging data from raw files to a usable format.
- Rebuilt California Families Project website and Personality Development Collaborative website.

Course Grader

Davis, CA

UC Davis Department of Statistics

April 2019 to February 2020

- Graded homework assignments from 150 students per class in upper-division statistics courses.

Research Assistant in Data Analysis

Davis, CA

UC Davis Asian American Center on Disparities Research

September 2017 to June 2018

- Researched, wrote, and presented research poster with a team at a research conference.
- Performed ANOVA and multivariate regression data analysis in SPSS on a sample of 425 students.
- Administered surveys and interviews to 30 study participants individually for later published research.

Math Instructor

Foster City, CA

Mathnasium Learning Center

February 2017 September 2017

- Taught math one-on-one to over 60 students K-12 from diverse backgrounds so students succeed in school.

Projects

Identifying Water Ice on Mars using Statistical Features of Radargrams

Summer 2020

- Extracting image and texture features from radargrams of subsurface of Mars to identify water ice.
- Using R to implement the most up-to-date statistics and mathematics research in computer vision.

Data Science Projects (see github.com/nathanjchan)

October 2018 to February 2019

- Analyzed the SF Chronicle website, baseball database, Craigslist apartment listings, and handwritten numbers.
- Used SQL to query the database and Python and R to clean, analyze, and visualize the data.

Project Pinpoint Mobile Game

Summer 2018

- Simple bubble popping mobile game with increasing difficulty. Implemented in JavaScript with Cocos Creator.

Calories Per Dollar Mobile App

March 2020

- Simple calculator to output calories per dollar based on calories, serving, and price. Used Kotlin in Android Studio.

Eagle Scout

May 2016

- Led teams in environmental projects and excursions. Leadership, team-building, and volunteering. And singing.