# Naomi Chou

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#### Education

## University of California, Los Angeles (UCLA)

Los Angeles, CA

Bachelor of Science in Statistics & Data Science, Minors in Professional Writing & Digital Humanities

Expected June 2025

**Relevant Coursework:** C++, Computational Statistics, Data Structure & Algorithms, Design & Analysis of Experiments, Discrete Math, Linear Algebra, Machine Learning, Multivariate Calculus, Probability & Statistics, R, Statistical Consulting

### **Experience**

#### **Roadrunner Venture Studios**

Los Angeles, CA

Data Analyst Intern

Feb. 2024 - Present

- Leading an extensive web scraping operation via Excel, Python, and R to collect over 10,000 publications and profiles related to 3D printing and additive manufacturing, efficiently storing and organizing findings in a custom database on AWS S3
- Conducting in-depth data analysis of the scraped datasets using NumPy and Pandas to identify optimal 3D printing technologies for Fab AI, a Roadrunners Venture Studios co-founded company merging 3D printing with prompt engineering

Spade AI

Brooklyn, NY

Feb. 2024 - Present

- Data Science/AI Engineer Intern
  - Elevating generative AI models by integrating prompt engineering with Python programming, leveraging the OpenAI API to improve content accuracy and quality significantly
  - Developing a Python-powered chat interface to deliver precise market intelligence insights
  - Utilizing Jira for project management to efficiently organize and track development tasks and collaborating on the expansion of product features to include competitor and risk analysis

### **UCLA Office of Advanced Research Computing**

Los Angeles, CA

High Performance Computing (HPC) Systems Intern

Jan. 2024 - Present

- Enhancing scholarly communication by editing citations on Zotero and web scraping related publications, acknowledging the significant contributions of the UCLA Hoffman2 cluster to various research projects
- Conducting comprehensive data analysis to evaluate the cluster's impact and identify opportunities for optimization, informing future enhancements and user support strategies

#### **Projects**

## **Sentiment Analysis of Trump Tweets**

Jan. 2024 – Present

- Executing a sentiment analysis on over 50,000 tweets by Donald Trump (2009-2021) focusing on anger, using R and the tidytext and tidyverse packages for precise emotion quantification and natural language processing.
- Appling time series analysis in R to chart the progression of anger levels in tweets, utilizing dplyr for data manipulation and ggplot2 for visualizing the emotional trend over 12 years

#### **Predictive Analysis of Alcoholic Status**

Oct. - Dec. 2023

- Developed a Random Forest predictive model to determine alcoholic status by analyzing a large dataset of 70,000 patient profiles with 26 predictors, achieving a significant accuracy of ~73%
- Leveraged R for comprehensive data analysis and cleaning with the 'mice' package, while applying predictive modeling packages (caret, tree, glmnet, e1071, randomForest) and enhancing data interpretation through ggplot2 visualizations

TunnelMan

July - Aug. 2023

- Illustrated proficiency in game design by developing TunnelMan, an interactive grid-based game where players navigate through levels by strategically collecting points through special items while avoiding in-game adversaries
- Programmed advanced algorithms in C++, enriching gameplay dynamics by defining character behaviors, optimizing collision detection systems, and elevating player engagement via object-oriented programming

## **Leadership & Involvement**

## Pi Sigma Epsilon, Eta Epsilon

Los Angeles, CA

VP of Finance

Sept. 2022 - Present

- Managed quarterly budget allocations exceeding \$10,000 while optimizing financial processes for streamlined operations
- Orchestrated fundraising projects that raise an average of \$2,000 each quarter for the Chapter

## **Skills & Interests**

Languages: English (Native), Mandarin (Native), Taiwanese Hokkien (Proficient)

**Skills:** C++, R (tidyverse, ggplot, caret, tidytext), Python (NumPy, Pandas, Matplotlib, Scikit-Learn), SQL (Intermediate), Tableau (Intermediate), Git/GitHub, Mathematica, LaTex, Word, PowerPoint, Teamwork, Communication, Critical Thinking

Interests: Cafe hopping, Fashion, Film Photography, Hiking, Makeup and Skincare, Museums, Traveling