# **ELLEN WEI**

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#### **EDUCATION**

# University of California, Los Angeles

2020-2024

BS in Statistics & Data Science, Bioinformatics (Dean's List)

*Statistics Coursework:* Computational & Mathematical Statistics, Statistical Inference, Time Series Analysis, Statistical Consulting, Research in Statistics, Linear Models

*Finance Coursework (Graduate level):* Statistical Models in Finance, Decision-Making in Stochastic Systems (Reinforcement Learning)

Computer Science Coursework: Algorithms, Data Structures, Databases, Machine Learning, Systems and Signals; Graduate level: Deep Learning for Computer Vision

#### **EXPERIENCE**

# Sumitomo Mitsui Banking CorporationJuly 2024Technology Analyst in Platforms Integration & AutomationNew York, NYSumitomo Mitsui Banking Corporation (Data Science Intern)June-Aug 2023UCLA Computational Diagnostics Lab (Research Assistant)Aug-Nov 2023UCLA Data Science in Cardiovascular Medicine ResearchJune-Nov 2022Program (Research Assistant)Program (Research Assistant)

# **PROJECTS**

# **Statistical Models in Finance Portfolio Optimization**

Dec 2023

Implemented and evaluated stock market portfolio performance using models such as single index, multigroup, multi-index, efficient frontier, and Black-Scholes to optimize portfolio allocation and risk management strategies

#### **Paper Review: Stable Neural Stochastic Differential Equations**

May 2024

Addressing missing time-series data using 3 types of Neural SDEs and its robustness under distribution shifts using stochastic stability compared to Neural ODEs and CDEs, RNN, LSTM, GRU

#### **US Employment Rate Report**

Ian 202

- Conducted time series analysis on employment rate based on housing supply rate and interest rate to compare forecasting models on rate fluctuations
- Performed trend analysis, compared multiple models such as exponential smoothing, ARIMA, multiple regression, random forest, GBM, Prophet

### **Object Detection Algorithms Technical Blog**

Jan-Mar 2023

https://ucladeepvision.github.io/CS188-Projects-2023Winter/2023/03/26/team 20-object-detection.html

Analysed and discussed the performance of 5 R-CNN based models and YOLO for transfer learning using OpenMMLab's MMDetection and PyTorch on an aerial maritime applications

#### **AWARDS**

## ASA Datafest @UCLA (Best Visualization)

April 2022

Analyzed 150k+ row role-playing video game; player segmentation using time series data with hierarchical, k-means clustering in R and Python

Languages: Python, R, SQL, C++, HTML, CSS, Javascript

Technologies/Frameworks: MongoDB, Apache Spark, Azure DevOps, PostgreSQL, ServiceNow, Linux, Cloud Services, Docker, React Native, Tableau, Git