Henry Xu

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Education

UC Berkeley

Fall 2020-Spring 2021

M.S. Electrical Engineering and Computer Science

GPA 4.0

Fall 2016–Spring 2020 **B.A.** Computer Science

Skills

Programming:

Python Java
JavaScript Stata
Go Matlab
C React
C++ SQL

Language:

Native in English Fluent in Mandarin

Coursework

Advanced Robotics
Deep RL
Econometrics
Efficient Algorithms
Linear Algebra
Machine Learning
Real Analysis
Stochastic Processes
Stochastic Estimation
Theoretical Statistics
NLP

Teaching

Macroeconomics
Probability for Data Science

Projects

BERT Q&A Adversarial Lane Verification Transformer Summarization henryzxu.com

Work Experience

Sora ID

Software Engineer

September 2021—Present

- Designed and implemented a decisioning language and graph-based execution framework for identity verification
- Leveraged OLS and machine learning to refine fraud detection, improving passthrough rates by 20%
- Directed the transition to asynchronous data processing, streamlining user experience and doubling performance
- Performed market analysis and met with customers to guide new projects, opening opportunities with untapped market segments

Social Science Prediction Platform January 2019—September 2021 Software Engineer (Part-Time)

- Led full stack development on an initiative to collect and assess expert forecasts on social science research and policy
- Supported thousands of researchers and forecasters with customized survey programming and response analysis

Federal Reserve Bank of New York May 2019—August 2019 Summer Analyst, Supervision and Innovation Lab

- Examined abstractive approaches to summarization and implemented improvements to current methodologies
- Applied state of the art natural language processing models to analyze and cluster financial documents
- Coordinated with bank examiners to build Excel macros organizing examination agendas
- Assessed robustness of firms' governance and controls

BlackRock

May 2018—August 2018

Summer Analyst, Aladdin Product Group

- Enhanced database resiliency by designing and implementing a model for predicting and filtering futile database queries at the caching layer
- Improved Apache Spark performance over 10x by optimizing and batching DataFrame API calls
- Built an NLP-based project management tool for Confluence to enhance cross-team communication

Research Experience

UC Berkeley

August 2018—September 2021

Research Assistant, Mentor: Stefano Della Vigna

- Explored supermarket pricing trends using time series analysis
- Analyzed policy diffusion through state bill text similarity
- Identified gender biases in academic fellowships and publishing (joint work with David Card)

UC Berkeley

February 2020—May 2021

Research Assistant, Mentor: David Wagner

 Investigated end-to-end lane detection algorithm robustness to adversarial examples (PyTorch) [arXiv]

UC Berkeley

August 2019—December 2019

Undergraduate Research Assistant, PI: Peng Gao

 Designed open-domain dialogue systems to build trust and elicit information from malicious agents (PyTorch/Tensorflow)