

Henry Xu

858-774-9238

henry.z.xu@gmail.com

8399 Crimson Cedar Pl
San Diego, California 92129

Education

UC Berkeley

Fall 2016–Spring 2020

B.A. Computer Science
GPA 3.978

Skills

Programming:

Java	C	Stata
Python	C++	Matlab
Swift	SQL	JS
Go	R	React

Language:

Native in English
Fluent in Mandarin

Coursework

Computer Graphics
Machine Learning
Advanced Robotics
Deep RL
Computational Photography
Efficient Algorithms
Computer Security
Stochastic Processes
Linear Algebra

Projects

BERT Q&A Demo
HSML-RL
Dyna-PEARL
Transformer Summarization
henryzxu.com

Industry Experience

Federal Reserve Bank of New York May 2019–August 2019
Summer Analyst, Innovation Lab

- Constructed proof of concept applications showcasing current state of the art natural language processing models to exhibit use cases of machine learning to firm stakeholders
- Examined abstractive approaches to summarization and proposed improvements to current methodologies
- Implemented regression-based extractive summarization after leading an extensive text extraction and cleaning effort

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
- Applied agile practices to maximize team productivity and meet weekly project deadlines
- Built a NLP-based project management tool built on top of Confluence to enhance cross-team communication

Research Experience

UC Berkeley August 2019–Present
Undergraduate Research Assistant, PI: Peng Gao

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

UC Berkeley August 2019–December 2019
Advanced Robotics/Deep Reinforcement Learning, Final Projects

- Adapted Hierarchically Structured Meta-Learning (HSML) for RL environments and assessed the effectiveness of task exploration in the learned skill space (PyTorch)
- Investigated how inverse RL could reduce the reliance of deep learning algorithms on on-policy data (Tensorflow)

UC Berkeley August 2018–Present
Undergraduate Research Assistant, Mentor: Stefano DellaVigna

- Explored novel clustering and visualization techniques to model supermarket chain pricing schemes (numpy/sklearn)

Florida International University May 2017–August 2017
Research Experience for Undergraduates, Mentor: Niki Pissinou

- Developed and tested models to simulate and detect collusion attacks in social networks
- Solved optimization problems in software-defined networking using graph theory and tested various optimization proposals in ns-3

Teaching Experience

UC Berkeley
Undergraduate Student Instructor

- **Introduction to Economics**
 - Fall 2019
- **Intermediate Macroeconomic Theory**
 - Spring 2019
- **Probability and Mathematical Statistics in Data Science**
 - Fall 2018
 - Fall 2017