# XIAOMENG "LAURA" YU

Los Angeles, CA • (213) 234-8588 • yuxiaome@marshall.usc.edu • laurayu0916.github.io

### **EDUCATION**

# University of Southern California, Marshall School of Business - Los Angeles, CA

May 2023

Master of Science in Business Analytics (STEM)

• GPA: 3.80

# University of Illinois at Urbana-Champaign - Champaign, IL

December 2019

Bachelor of Science in Actuarial Science, Minor in Business

• GPA: 4.00, Summa Cum Laude, passed SOA (P/1) and SOA (FM/2)

#### INTERNSHIP EXPERIENCE

### **Upland Capital Group** – Dallas, TX

January 2023 - Present

Actuarial Analyst Intern

- Code in Python to replicate all the data processing logic in the Excel version of the re-rating tool for Construction business
- Participate in Actuarial/Data team effort to validate the new Electronic Data Processing system in Microsoft Azure

## LA Clippers LLC – Los Angeles, CA

October 2022 – January 2023

Business Insights Intern

- Implemented complex SQL queries to load data from multiple sources and transformed data into required format
- Created dashboards for demographic trends and ticket sales in Power BI and analyzed demographic differences of attendees across different games, opponents, sections, etc.
- Conducted hypothesis tests to verify whether ClipperVision view duration would significantly increase due to star players, consecutive wins, Plus-Minus in scores, etc.

# **Fashom.com ("Affordable Styled Clothing Delivered to Your Doorstep")** – Miami, FL Data Analyst Intern May 2022 – October 2022

- Improved the recommender system for internal use by incorporating NLP
  - Classified customer reviews into positive and negative topics, reached 92% accuracy, with BERT and PyTorch
  - Architected a ML pipeline, utilizing 2 NLP models, scoring 10k+ items based on how the item had been reviewed by customers
  - Decreased 15% return rate by removing items with low scores in the final stage of recommender system
- Upgraded internal customer information database by rectifying shirt sizes based on their purchase history using Matrix Factorization and classifying customers into different body shapes using K-means clustering
- Enhanced recommender system by optimizing the model based on ranking loss, reached 6% recall for top 10 items
- Optimized Fashom's operations by maintaining databases, monitoring weekly KPIs, and analyzing other core data

### Keck Medicine of USC – Los Angeles, CA

Business Analyst Intern Github.com/laurayu0916/Patient-Intake-Workflow

**January 2022 – May 2022** 

- Standardized patient intake workflow by building a SQL database for 250 patient cases
- Visualized waiting days for each intake step in Dashboard, and proposed recommendations to reduce waiting time and improve inquiry-to-patient rate
- Increased work efficiency for schedulers by crawling U.S. visa waiting days from travel.state.gov using Selenium

### **PROJECTS**

### Tensor And Matrix Operations (with) PyTorch Github.com/laurayu0916/TeAMOTorch

- Collaborated with Andrew to build a PyTorch-based, Python library, providing a highly customizable framework meant to facilitate matrix factorization workflows primarily used in recommender systems
- Implemented 3 types of ranking losses, achieved up to 6% recall@10, 15% recall@30, 21% recall@50, on a 20% test dataset of the MovieLens 100k dataset

### LA Crime Data Analysis and Modeling Github.com/laurayu0916/LA-Crime-Analysis

- · Researched LA crime data, indicating when and how the number of crimes would change in this city
- Visualized crime events w.r.t. category and time via Spark SQL and gave insights on how to distribute the police

### **SKILLS & INTERESTS**

- Programming Tools: Python (NumPy, Pandas, Scikit-Learn, TensorFlow), SQL, Scala, PySpark, MongoDB
- Statistical Analysis: Probability Distributions, Hypothesis Testing (A/B Testing), Time Series Analysis
- Certificates: AWS Certified Cloud Practitioner, Tableau Desktop Specialist