

XIAOMENG "LAURA" YU

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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

- Calculate metrics to monitor changes in product competitiveness and risk exposure
 - Automate the entire data processing logics, extracting data from database and performing calculations in Python, to monitor changes easily over time
 - Compute policy retention rate and premium retention rate. Break both down by state, broker, and policy size
 - Visualize geographical premium distribution using zip codes in Power BI
- 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 and transform 100k+ rows of data from multiple sources
- Created dashboards for ticket sales in Power BI, and analyzed differences in family size of attendees across different games to support marketing team, which successfully targeted larger families for lower tier games
- Conducted hypothesis tests verifying the number of ClipperVision viewers would increase due to consecutive wins to help marketing team target potential viewers after win streaks

Fashom.com (“Affordable Styled Clothing Delivered to Your Doorstep”) – Miami, FL

May 2022 – October 2022

Data Analyst Intern

- 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 many negative or positive reviews the item had received
 - Decreased 15% return rate by removing low scored items in the final stage of recommender system
- Upgraded recommender system by changing the loss function from MSE to ranking loss, which predicted relative distance between inputs. Reached 6% recall for top 10 items
- Rectified customer shirt sizes based on purchase history through Matrix Factorization. Classified customers into body types, which were used by stylists to provide better dressing advice, using K-means clustering

Keck Medicine of USC – Los Angeles, CA

Business Analyst Intern [Github.com/laurayu0916/Patient-Intake-Workflow](https://github.com/laurayu0916/Patient-Intake-Workflow)

January 2022 – May 2022

- Standardized patient intake workflow by building a SQL database for 250 patient cases
- Visualized average waiting days for each patient intake step in Dashboard. Proposed recommendations which reduced waiting time by 20% and improved inquiry-to-patient rate
- Achieved 100% increase in 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](https://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

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