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)
- Honors: Dean's Honor List, GPA: 3.84

University of Illinois at Urbana-Champaign – Champaign, IL   **December 2019**
Bachelor of Science in Actuarial Science, Minor in Business
- Honors: Summa Cum Laude, GPA: 4.00

INTERNSHIP EXPERIENCE

Fashom.com ("Affordable Styled Clothing Delivered to Your Doorstep") – Miami, FL   **May 2022 – Present**
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 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

Tencent – Shenzhen, China
Entertainment Market Analyst Intern   **September 2020 – January 2021**
- Scraped monthly KPIs of 2,000 mobile games from App Annie and picked out 30 mobile games to monitor every month, analyzing which marketing strategies contributed to the increase in KPI
- Analyzed advertising strategies for mobile games based on monthly Share of Voice Rankings
- Presented on *State of Survival* and *Free Fire* to marketing team and game R&D team, including advertising costs, content marketing, operational objectives, and target audience

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

Vehicle Insurance Sales Prediction Github.com/laurayu0916/Vehicle-Insurance-Sales-Prediction
- Predicted whether a current health insurance policyholder would also interested in the vehicle insurance
- Developed models using Random Forest and Gradient Boosted Trees in PySpark MLlib, reached highest recall 0.93

Anomaly Detection for Financial Transaction Data Github.com/laurayu0916/Fraud-Detection
- Researched transaction data from an e-commerce company to predict fraud transactions
- Built a scoring system deciding whether an transaction should be passed, declined or manually inspected

SKILLS & INTERESTS

- Programming Tools: Python, SQL, Scala, PySpark, MongoDB, Neo4j
- ML Libraries: NumPy, Pandas, Scikit-Learn, Tensorflow, PyTorch, HuggingFace Transformers
- Statistical Analysis: Probability Distributions, Hypothesis Testing (A/B Testing), Time Series Analysis
- Certificates: AWS Certified Cloud Practitioner, Tableau Desktop Specialist