

Liu Jason Tan

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Experience

Morgan Stanley

Analyst, Operational Risk Analytics

New York, NY

August 2022 – Present

- Built **end-to-end models** from concept to production using **R, Python**, and **Git** to **automate** manual processes, model testing, documentation, and presentations, reducing over 50% workload
- **Collaborated** with global teams to complete shared goals and meet global **regulatory** requirements to pass 100% of regulatory and audit screenings
- Balanced multiple internal and regulatory projects to meet strict deadlines while coming up with **unique solutions** to improve efficiency of the team leading to ~80% faster turn-around time

Education

Master of Applied Data Science - August 2022

University of Michigan – Ann Arbor

GPA: **4.00** /4.00

Ann Arbor, Michigan

Bachelor of Science in Information Systems – May 2020

Stony Brook University

GPA: **3.64** /4.00

Stony Brook, New York

Skills

- Languages and Tools: **Python** (with libraries such as **Numpy, Pandas, Keras, TensorFlow, SciKit Learn, Pyspark, SciPy**, and **NLTK**), **R, SQL**, **Git**
- Constructed models with supervised and unsupervised machine learning algorithms such as **deep neural networks, classification, clustering, dimensionality reduction**, and **regression**
- Data **extraction** (SQL), data **manipulation** (Python), getting **insight** from data, data **visualization** (Python), and **presentation** to stakeholders
- **Communicating** complex technical concepts to stakeholders to make **informed decision, Problem-Solving** with **outside-the-box** solutions, track record of improving **efficiency** in the team

Projects

- Text Classification (internal) – Applied **Natural Language Processing** techniques on operational risk issue description to **vectorize** and **transform** text data. Used **Machine Learning** to classify risk issues to correct risk type with over **90% accuracy**. Reduced manual labeling work by 90%.
- Advanced Measurement Approach (**AMA**) for Capital Reporting – Ran 1 million **Monte Carlo Simulations** to determine operational **value-at-risk (VaR)** losses at 99.9 percentile, calibrated using historical losses. **Passed 100%** of regulatory requirements.
- Comprehensive Capital Analysis and Review (**CCAR**) and Quarterly Stress Test (QST) - Used **statistical regressions modeling**, macro-economic variables, and historical risk loss data to forecast operational risk losses in the next 9 quarters. **Passed 100%** of regulatory requirements.