Liu Jason Tan

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Experience

Morgan Stanley *New York, NY*
Analyst, Operational Risk Analytics *August 2022 – Present*

- Built **end-to-end models** and pipelines from concept to production using **R**, **Python**, and **Git** to **automate** manual processes, model testing, and documentation, 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, and **mitigate risk**
- Balanced multiple internal and regulatory projects to meet strict deadlines while coming up with **unique solutions** to improve the efficiency of the team leading to ~80% faster turn-around time

Education

Master of Applied Data Science - *August 2022* GPA: **4.00** /4.00
University of Michigan – Ann Arbor *Ann Arbor, Michigan*

Bachelor of Science in Information Systems – *May 2020* GPA: **3.64** /4.00
Stony Brook University *Stony Brook, New York*

Skills

- Languages and Tools: **Python** (5+ years 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**
- 3+ years of experience in 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 decisions**, **Problem-Solving** with **outside-the-box** solutions, improving **efficiency** in the team, and uncovering insights

Recent Projects

- Text Classification (internal) – Applied **Natural Language Processing** techniques on operational risk issue description to **transform** text data. Used **Advanced 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 **advanced statistical regression modeling**, macro-economic variables, and historical risk loss data to forecast operational risk losses in the next 9 quarters. **Passed 100%** of regulatory requirements.