

# Liu Jason Tan

Location: New York City • Phone: (347) 764 – 5660 • E-mail: liu.jason.tan1@gmail.com  
LinkedIn: <https://www.linkedin.com/in/liujasontan/> • Website: <https://liujasontan.com/>

## Experience

---

### Morgan Stanley

Analyst, Operational Risk Analytics

New York, NY

August 2022 – Present

- Developed **end-to-end models** and pipelines, spanning from conceptualization to production utilizing **R**, **Python**, and **Git** to **automate** manual processes, streamline model testing, and documentation, resulting in a workload reduction exceeding 50%
- **Collaborated** with global teams to achieve common objectives and meet global regulatory requirements to pass 100% of regulatory and audit screenings, and **mitigate risk**
- Balanced multiple internal and regulatory projects, surpassing strict deadlines and innovating **unique solutions** to enhance team efficiency

## 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** (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. Utilized **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) - Applied **advanced statistical regression modeling**, incorporating macro-economic variables and historical risk loss data to forecast operational risk losses in the next 9 quarters. **Passed 100%** of regulatory requirements.
- Additional data science projects listed on my website