

# Liu Jason Tan

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## Experience

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### Morgan Stanley

New York, NY

Analyst, Operational Risk Analytics

August 2022 – Present

- Combined knowledge from machine learning experts, operational risk management, model risk management, etc. to facilitate company-wide **risk mitigation** and **data-driven decision making**
- Leveraged **machine learning techniques** and **natural language processing** to build end-to-end models from concept to production using R, Python, and Git
- Maintained federal **regulatory reporting** requirements with **model risk management** for stress testing and capital reporting using **statistical regression modeling**, and **simulations**
- **Analyzed large datasets** and collaborated with business units to assess operational risk, find potential **risk mitigations**, and provide risk management guidance
- Used **advanced machine learning** to enhance internal quality assurance of operational risk (including fraud) issues and incidents
- Communicated complex data-driven insights to non-technical stakeholders, aiding in informed **decision-making** and **strategy formulation**.

## Education

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### Master of Applied Data Science - August 2022

GPA: **4.00** /4.00

University of Michigan – Ann Arbor

Ann Arbor, Michigan

Relevant Courses: *Data Mining, Big Data, Supervised Learning, Unsupervised Learning, Deep Learning, Applied Natural Language Processing*

### Bachelor of Science in Information Systems – May 2020

GPA: **3.64** /4.00

Stony Brook University

Stony Brook, New York

## Skills

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- Programmed in C, HTML, CSS, Java, **R**, SQL, Spark, and **Python** (with libraries such as **Numpy**, **Pandas**, **Keras**, TensorFlow, SciKit Learn, Pyspark, **SciPy**, and NLTK)
- Constructed models with supervised and unsupervised machine learning algorithms such as **deep neural networks**, **classification**, **clustering**, **dimensionality reduction**, and **regression**
- Familiar with Data Mining and Time Series Analysis concepts such as Apriori, **Hidden Markov Models**, Fourier Theorem, Dynamic Time Warping, and ARIMA,
- Implemented **Natural Language Processing** (NLP) methods such as **Word2Vec**, **WordNet**, **Part-Of-Speech Tagging**, **LSTM**, and **BERT** for sentiment analysis and word-sense disambiguation
- Advanced proficiency in **Microsoft** Office (Word, PowerPoint, Excel), **Git**, and programming (**Python** and **R**) with the ability to learn new tools and platforms quickly
- **Detail -Oriented** with the ability to **work under pressure**, **meet strict deadlines**, and **balance multiple projects** to deliver quality results to stakeholders
- Strong **communication**, **collaboration**, **time management**, **critical thinking**, and **problem-solving skills** with a passion for working and learning in a fast-growing company