XINYI (JACQUELYN) GE

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EDUCATION

Northeastern University — Khoury College of Computer Sciences *San Jose, California USA*
M.S. in Computer Science (GPA: 3.78; Expected May 2021) *August 2019 - Present*
Courses: *Programming Design Pattern; Computer System; Algorithms; Foundations of Artificial Intelligence; Machine Learning; Information Retrieval; Natural Language Processing; Web Development*
Illinois Institute of Technology — Stuart School of Business *Chicago, Illinois USA*
Ph.D. in Management Science *August 2011 - May 2019*
M.S. in Finance *August 2009 - May 2011*
East China Normal University — School of Finance and Statistics *Shanghai, China*
B.E. in Finance *September 2005 - June 2009*

WORK EXPERIENCE

Jeeva Health *Software Engineer Intern* *February 2021 - Present*
- Designed natural language processing pipelines in Python to process medical therapy script data.

Illinois Institute of Technology *Chicago, Illinois USA*
Research Assistant *January 2014 - May 2019*
Teaching Assistant *Fall 2012 - Fall 2016*
Efficient Capital Management *Warrenville, Illinois USA*
Research Analyst Intern *May 2015 - August 2016*
- Developed systems to assist investment managers for fund selection, and toolkit/dashboards for clients to compare portfolio performances.
- Implemented and leveraged financial packages in R for monthly portfolio re-balancing.
- Researched on new optimal trading strategies.

SELECTED PROJECTS

Medical Data Understanding
- Utilize NLP techniques to process and understand medical data.
- Responsible for constructing data processing pipeline, and building NLP models in Python.

Home Credit Default Risk Prediction
- Implemented various Machine Learning algorithms *by hand* (using Ruby), including: Linear/Logistic Regression, SVM, Decision Tree/Random Forest, and Neutral Networks.
- Conducted EDA, feature engineering and built prediction models. The final model beats 75% performances with a compact feature set.

Academic Search Engine for Computer Science Professors
- Created a search engine (an inverted-index from crawled data, and hybrid ranking systems) with Java and Lucene, to support advanced search with multiple research-related criteria.

Automatic Fund Selection System
- Automatically downloads monthly fund data, runs statistical analysis, predicts funds to select and delivers a report for investment managers.
- Developed this end-to-end system in Python. Replaced the old VBA system with more analysis and direct fund selection prediction.

TECHNICAL SKILLS & CERTIFICATES

- **Programming Languages:** Java, Python, C/C++, Ruby, HTML, JavaScript, CSS, SQL, R, SAS
- **Toolkits:** NumPy, Pandas, Matplotlib, scikit-learn, Keras/Tensorflow, Scrapy, Lucene, Hadoop, Bootstrap, NodeJS, React
- **Certificates:** Machine Learning (by Stanford University, Coursera), Python for Data Science and Machine Learning (by Udemy), Holder of Financial Risk Manager (FRM) 2017 (by GARP)