

# RUMING LIU

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## EDUCATION

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<b>Stevens Institute of Technology</b>	Hoboken, NJ
<i>Doctor of Philosophy, Finance</i>	<i>September 2022 –</i>
<b>University of Southern California</b>	Los Angeles, CA
<i>Master of Science, Mathematical Finance</i>	<i>September 2019 – June 2021</i>
<b>Jiangxi University of Finance and Economics</b>	Jiangxi, China
<i>Bachelor of Economics, Finance</i>	<i>September 2015 – June 2019</i>
<b>University of California San Diego</b>	La Jolla, CA
<i>Extension Program, Statistics</i>	<i>March 2018 – June 2018</i>

## WORK EXPERIENCE

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<b>Moody's Analytics</b>	San Francisco, CA
<b>Financial Engineer Client Service Specialist</b>	<i>September 2021 – September 2022</i>
<ul style="list-style-type: none"><li>• Provided thorough quantitative and conceptual solutions for default risk to clients.</li><li>• Supported on products <a href="#">RiskCalc</a>, <a href="#">CreditEdge</a>, <a href="#">RiskFrontier</a> and <a href="#">MIS rating</a> via web, application, and API.</li><li>• Worked on Moody's credit model (Probability of Default, Expected Default Frequency, Loss Given Default, Distance to Default, Implied Rating, G-Correlation, Credit Migration, Risk Contribution, etc.)</li></ul>	
<b>China Investment Securities</b>	Guangdong, China
<b>Derivatives Analyst</b>	<i>December 2018 – March 2019</i>
<ul style="list-style-type: none"><li>• Designed, built and maintained tools used in dynamic hedge program and derivative portfolio management.</li><li>• Assisted in developing option price forecasting model.</li><li>• Developed a detailed knowledge of volatility arbitrage and market maker trading strategy.</li><li>• Provided Front Office support for financial reporting and data mining.</li></ul>	
<b>China Merchants Bank</b>	Guangdong, China
<b>Financial Data Analyst</b>	<i>December 2017 – January 2018</i>
<ul style="list-style-type: none"><li>• Took part in Bitcoin market arbitrage analysis research, worked in trading strategy and algorithm part.</li><li>• Worked with other programmer in financial products classification project by machine learning technique.</li><li>• Involved in design, testing and implementation of new financial and managerial reports.</li><li>• Wrote and published regular and ad hoc macro-economy reports.</li></ul>	

## PROJECT AND RESEARCH

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- *Sentiment in the Cross Section of Cryptocurrency Returns* ([Link](#))
- *Cryptocurrency Arbitrage Across Exchanges*
- *Front-running Game in Blockchain* ([Link](#))
- *Cointegration Method in Statistical Arbitrage* ([Link](#))
- *A Possible Way to Search Pairs Trading Arbitrage* ([Link](#))
- *Thoughts on the Internationalization of Chinese RMB* ([Link](#))

## ADDITIONAL INFORMATION

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Experienced with Blockchain technology: Bitcoin, Ethereum and other blockchain protocols.  
Competent in Blockchain development (DApps) language Solidity, Brownie framework, Rust and Vyper.  
Good at using statistical tools such as Matlab, SPSS and R to conduct quantitative research.  
Familiar with statistical inference and machine learning by using Python.  
Skilled in API and web mining. Have experience in MySQL and data mining.  
Passed FRM examination Level I in 2017.