

Samira Amiriyan

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Education

PhD	Mathematical Sciences, University of Liverpool , Liverpool, UK	2023 – Now
	<ul style="list-style-type: none"> Primary Supervisor: Dr. Ehsan Azmoodeh Secondary supervisor: Dr. Youness Boutaib 	
M.Sc.	Mathematical Finance, Amirkabir University of Technology (Tehran Polytechnic) , Tehran, Iran	2018 – 2020
	<ul style="list-style-type: none"> Primary Supervisor: Dr. Erfan Salavati Secondary supervisor: Dr. Omid Naghshine Arjmand M.Sc. Thesis: “Fractional Stochastic Volatility Models and Applications in Pricing” Ranked 2nd among M.Sc. students in Mathematical Finance major GPA: 3.86 / 4.0 	
B.Sc.	Applied Mathematics, Amirkabir University of Technology (Tehran Polytechnic) , Tehran, Iran	2014 – 2018
	<ul style="list-style-type: none"> 28 credits in Industrial Engineering Among the top 10% of students GPA: 3.64 / 4.0 	

Publications

• 'Option Pricing in The Fractional Stochastic Volatility Models using Malliavin calculus', Samira Amiriyan , Paper Presentation of The 52nd Annual Iranian Mathematics Conference , 📄	Sep 2021
• 'Fractional Stochastic Volatility Models and Applications in Pricing', Samira Amiriyan , Paper Presentation of The 6th FINACT-IRAN National Conference on Financial and Actuarial Mathematics , 📄	Feb 2020

Teaching Experience

• University of Liverpool, Liverpool, UK Teaching Assistant, Department of Mathematical Sciences	
– Statistics and Probability I, Dr. Alena Haddley	Sep 2025 - Jan 2026
– Applied Probability, Dr. Ehsan Azmoodeh	Sep 2025 - Jan 2026
– Supervisor of undergraduate students (M391), Dr Youness Boutaib	Jun 2025 - July 2025
– Statistics and Probability I, Dr. Alena Haddley	Sep 2024 - Jan 2025
– Applied Probability, Dr. Ehsan Azmoodeh	Sep 2024 - Jan 2025
– Supervisor of undergraduate students (M391), Dr Youness Boutaib	Jun 2024 - July 2024
– Statistics and Probability I, Dr. Alena Haddley	Sep 2023 - Jan 2024
– Applied Probability, Dr. Ehsan Azmoodeh	Sep 2023 - Jan 2024
• Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran Teaching Assistant, Department of Mathematics and Computer Science	

Conferences & Presentations

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| • 'COMPUTING THE IMPLIED VOLATILITY THROUGH NEURAL NETWORKS WITH ASYMPTOTIC REGIMES', Samira Amiriyān and Youness Boutaib, Presentation of The 3rd FAMiLLY workshop , 🔗 | Nov 2025 |
| • 'COMPUTING THE IMPLIED VOLATILITY THROUGH NEURAL NETWORKS WITH ASYMPTOTIC REGIMES', Samira Amiriyān and Youness Boutaib, Poster Presentation of 5th Barcelona Summer School of Stochastic Analysis and Quantitative Finance , 🔗 | July 2025 |
| • 'Learning Price Function Under No Arbitrage', Samira Amiriyān , Poster Presentation of 7th Berlin Workshop on Mathematical Finance for Young Researchers , 🔗 | Sep 2024 |
| • 'Pricing European Options in Fractional Stochastic Volatility Models', Samira Amiriyān , Poster Presentation of The 12th Seminar on Probability and Random Processes , 🔗 | Sep 2019 |

Work Experience

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| • Residential Advisor , University of Liverpool 🔗 | Jun 2024 - Present |
| <ul style="list-style-type: none"> – Provide pastoral and first-response support and guidance to over 100 residents in university accommodation – Respond to emergencies and mediate interpersonal conflicts in line with university policy – Plan and deliver events to promote student wellbeing, inclusion, and community engagement | |
| • Chief Financial Officer at Rahyab Behineh Consulting Engineers Co. 🔗 | Jun 2020 - Jul 2021 |
| • Stock Trader (Personal Trader) at Tehran Stock Exchange Market 🔗 | Mar 2020 - Dec 2021 |

Honors & Awards

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| • 3.5 years Postgraduate Research Studentship (full-time rate) for a Ph.D. in Mathematics, School of Physical Sciences (Dept of Mathematics), University of Liverpool 🔗 , Liverpool, UK | 2023 |
| • Ranked 2nd among M.Sc. students of Mathematical Finance Major at Amirkabir University of Technology (Tehran Polytechnic) 🔗 , Tehran, Iran | 2020 |
| • Among the top 10% of B.Sc. students of Applied Mathematics Major at Amirkabir University of Technology (Tehran Polytechnic) 🔗 , Tehran, Iran | 2018 |
| • Full tuition scholarship for an M.Sc. (funded by the Iranian government) in Mathematics at Amirkabir University of Technology (Tehran Polytechnic) 🔗 , Tehran, Iran | 2018 |
| • Full tuition scholarship (funded by the Iranian government) for a B.Sc. in Mathematics at Amirkabir University of Technology (Tehran Polytechnic) 🔗 , Tehran, Iran | 2014 |

Fields of Interests

- Mathematical Finance
- Quantitative Finance
- Machine Learning Applications in Quantitative Finance
- Asian Options and Exotic Derivatives
- Implied Volatility Surface Modeling

Software Skills

Python | Matlab | C Programming | GAMS | LaTeX | Maple

Activities

- Postgraduate Leadership Programme Jan 2026
- Mental Health Aware, MHFA England Sep 2025
- RLSS UK Qualifications Level 3 Award in Emergency First Aid at Work, Royal Life Saving Society UK 2024 - 2027
- Participated in [Family Network Workshop](#), University of York Dec 2024
- Introduction to Supporting Student Learning, also known as Stage 1 of Foundations of Teaching in Higher Education, University of Liverpool Oct 2023 - Jan 2024
- Participated in [Family Network Workshop](#), University of Liverpool Dec 2023
- In charge of Moasharan Cultural and Social Magazine, AmirKabir University of Technology 2018 - 2019
- Secretary of the Coordination Council of The Extracurricular Student Club Arts and Culture, Amirkabir University of Technology 2018 - 2019
- Writer at Moasharan Cultural and Social Magazine, AmirKabir University of Technology 2017 - 2019
- Elected Head member and speaker of the Students Music Club of The Extracurricular office, Amirkabir University of Technology 2017 - 2018
- Chief Financial Officer of the Students Music Club of The Extracurricular office, Amirkabir University of Technology 2016 - 2017
- Playing Piano 2007-Present

Languages

Farsi Native
English Upper-Intermediate (IELTS: 7)
Arabic Basic knowledge