

Samira Amiriyan

📍 Liverpool, L35AE

✉ samira.amiriyan@liverpool.ac.uk

🌐 samiraamiriyan.wixsite.com

linkedin samiraamiriyan

Education

PhD Mathematical Sciences, [University of Liverpool](#), Liverpool, UK 2023 – Now

- Primary Supervisor: [Dr. Ehsan Azmoodeh](#)
- Secondary supervisor: [Dr. Youness Boudaib](#)

M.Sc. Mathematical Finance, [Amirkabir University of Technology \(Tehran Polytechnic\)](#), Tehran, Iran 2018 – 2020

- Primary Supervisor: [Dr. Erfan Salavati](#)
- Secondary supervisor: [Dr. Omid Naghshineh 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

- 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 Boudaib 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 Boudaib 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

- Fundamentals of logic and set theory, Dr. Farzad Didehvar

Sep 2018 - Jan 2019

Conferences & Presentations

- 'COMPUTING THE IMPLIED VOLATILITY THROUGH NEURAL NETWORKS WITH ASYMMETRIC REGIMES', **Samira Amiriyan** and Youness Boudaib, [Presentation of The 3rd FAMiLLY workshop](#), 
- 'COMPUTING THE IMPLIED VOLATILITY THROUGH NEURAL NETWORKS WITH ASYMMETRIC REGIMES', **Samira Amiriyan** and Youness Boudaib, [Poster Presentation of 5th Barcelona Summer School of Stochastic Analysis and Quantitative Finance](#), 
- 'Learning Price Function Under No Arbitrage', **Samira Amiriyan**, [Poster Presentation of 7th Berlin Workshop on Mathematical Finance for Young Researchers](#), 
- 'Pricing European Options in Fractional Stochastic Volatility Models', **Samira Amiriyan**, [Poster Presentation of The 12th Seminar on Probability and Random Processes](#), 

Work Experience

- **Residential Advisor**, [University of Liverpool](#) 
- 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
- Jun 2024 - Present
- **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

- 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 Moasheran 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 Moasheran 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