CURRICULUM VITAE

Rohan Sen

Institute of Finance and Euler Institute, USI Lugano, Lugano,

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EDUCATION

Università della Svizzera italiana

Ph.D. in Econometrics and Statistics

Main advisor: Paul Schneider Co-advisor: Michael Multerer

Lugano, Switzerland

January 2021 - present

Indian Institute of Technology Guwahati

M.Sc. in Mathematics and Computing

Project advisor: Subhamay Saha

Guwahati, India

July 2017 - June 2019

Ramakrishna Mission Vidyamandira

B.Sc. in Mathematics

Minors in Statistics and Computer Science

Howrah, India

July 2014 - July 2017

RESEARCH APPOINTMENTS

Stanford University

Visiting Student Researcher

Host: Markus Pelger

California, USA

September 2025 - December 2025

PROFESSIONAL EXPERIENCE

HCL Technologies

 $Senior\ Software\ Engineer$

Bangalore, India

September 2019 - December 2020

RESEARCH INTERESTS

- Kernel methods
- Financial econometrics
- Statistical learning
- Explainability

PUBLICATIONS AND PREPRINTS

• Kernel-based nonparametric tests for shape constraints; working paper, October 2025.

- Learning the stochastic discount factor via nonparametric option portfolios, with E. Luzzi and P. Schneider; working paper, October 2025.
- Probabilistic energy forecasting through quantile regression in reproducing kernel Hilbert spaces, with L. Pernigo and D. Baroli; ACM SIGENERGY Energy Informatics Review, February 2025.
- Fast empirical scenarios, with M. Multerer and P. Schneider; Journal of Computational Mathematics and Data Science, September 2024.
- Observation-specific explanations through scattered data approximation, with V. Ghidini, M. Multerer, and J. Quizi; Explainable Artificial Intelligence, XAI 2024, Communications in Computer and Information Science, July 2024.

CONFERENCES AND CONTRIBUTED TALKS

- 2nd IAS-SBM Joint Workshop on Financial Econometrics in the Big Data Era, Hong Kong University of Science and Technology, Hong Kong, August 2025; *Optimal variance swaps*.
- 17th Annual SoFiE (Society for Financial Econometrics) Conference, ESSEC Business School, France, June 2025.
- 18th International Joint Conference on Computational and Financial Econometrics (CFE) and Computational and Methodological Statistics (CMStatistics), King's College, London, UK, December 2024.
- FinEML Conference (Financial Econometrics Meets Machine Learning), USI Lugano, Switzerland, November 2024.
- 2nd World Conference on XAI (eXplainable Artificial Intelligence), Valletta, Malta, July 2024.
- FinEML (Financial Econometrics Meets Machine Learning) Conference, Erasmus University, Rotterdam, Netherlands, November 2023; Fast empirical scenarios.
- 15th Annual Conference of SoFiE (Society for Financial Econometrics), Seoul, South Korea, June 2023; Fast empirical scenarios.
- Conference on Stochastic Optimal Control in Economics, Finance, and Learning Theory, ETH Zürich, Switzerland, June 2023.
- 2nd Conference of Young Applied Mathematicians, Arenzano, Italy, September 2022; Kernel-based method for large empirical truncated moment problem.
- SFI (Swiss Finance Institute) Research Days, Gerzensee, Switzerland, June 2022.
- Conference on Probability and Stochastic Processes, Indian Statistical Institute, Kolkata, India, March 2022 (attended online).

PROFESSIONAL TRAINING AND WORKSHOPS

- Workshop on Advanced C++, CSCS Swiss National Supercomputing Centre, Switzerland, October 2023
- Workshop on Introduction to Decision Making and Uncertainty, Institute for Mathematical and Statistical Innovation, July 2021 (held online).

AWARDS AND HONORS

Awarded the USI Doctoral Mobility grant in April 2025 for pursuing mobility at Stanford University.

- Secured All India Rank 42 for Lectureship in the Junior Research Fellowship & Eligibility for Lectureship (NET) Exam 2019 conducted by the Council of Scientific and Industrial Research, India.
- Secured All India Rank 155 among 10834 candidates in the Joint Admission Test 2017 for Masters.
- Awarded the National Inspire Scholarship offered by the Department of Science and Technology, Government of India by securing a position in the top 1% in the 12th Board Examination in 2014.

SKILLS

- **Programming:** C++, Python, MATLAB, R.
- Languages: English (fluent), Italian (intermediate), Bengali (native), Hindi (intermediate).