# CURRICULUM VITAE

## Rohan Sen

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## EDUCATION

**Università della Svizzera italiana** — **Lugano, Switzerland**
Ph.D. in Econometrics and Statistics — January 2021 - January 2026
*Main advisor*: Paul Schneider
*Co-advisor*: Michael Multerer

**Indian Institute of Technology Guwahati** — **Guwahati, India**
M.Sc. in Mathematics and Computing — July 2017 - June 2019
*Project advisor*: Subhamay Saha

**Ramakrishna Mission Vidyamandira** — **Howrah, India**
B.Sc. in Mathematics — July 2014 - July 2017
Minors in Statistics and Computer Science

## RESEARCH APPOINTMENTS

**Stanford University** — **California, USA**
Visiting Student Researcher — September 2025 - December 2025
*Host*: Markus Pelger

## PROFESSIONAL EXPERIENCE

**HCL Technologies** — **Bangalore, India**
*Senior Software Engineer* — September 2019 - December 2020

## RESEARCH INTERESTS

- Kernel methods
- Financial econometrics
- Statistical learning

## 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

- 19th International Joint Conference on Computational and Financial Econometrics (CFE) and Computational and Methodological Statistics (CMStatistics), Birkbeck, University of London, UK, December 2025; *Kernel-based nonparametric tests for shape constraints*.
- 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).