

Shreya Bose

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EDUCATION

Florida State University <i>Ph.D. Financial Mathematics, Advisor: Dr. Ibrahim Ekren, CGPA: 3.7</i>	Tallahassee, FL May 2023
Florida State University <i>M.Sc. Financial Mathematics</i>	Tallahassee, FL Aug. 2018 – May 2020
Institute of Mathematics and Applications, Utkal University <i>M.Sc. Computational Finance, GPA: 8.60/10</i>	Odisha, India Aug. 2014 – May 2016
St. Xavier's College (Autonomous) <i>B.Sc.Honors in Mathematics, GPA: 6.20/10</i>	West Bengal, India Jul. 2011 – Jul. 2014

PROFESSIONAL EXPERIENCE

Instructor of Record <i>Department of Mathematics, Florida State University</i> <ul style="list-style-type: none">Precalculus Algebra	Jan. 2021 – Apr. 2021 Tallahassee, FL
Graduate Research Assistant <i>Department of Mathematics, Florida State University</i> <ul style="list-style-type: none">Worked on the paper titled Kyle-Back models with risk aversion and non-Gaussian beliefsStarted working on extending the previous work to the multi dimension setup	Aug. 2020 – Dec. 2020 Tallahassee, FL
Teaching Classroom Assistant in Mathematics <i>Department of Mathematics, Florida State University</i> <ul style="list-style-type: none">Helped the instructor with building pages in Canvas, creating/editing lab activities in the course College Algebra for Fall 2020.	Jun. 2020 – Jul. 2020 Tallahassee, FL
Graduate Teaching Assistant <i>Department of Mathematics, Florida State University</i> <ul style="list-style-type: none">Conducted labs for different courses like College Algebra, Precalculus Algebra, Business Calculus, Practical Finite Mathematics, Mathematics for Liberal Arts	Aug. 2018 – Jun. 2020, Jun. 2021 – Jul. 2021 Tallahassee, FL
Research Associate <i>Department of Finance & Accounting, Indian Institute of Management</i> <ul style="list-style-type: none">Worked on research papers under the guidance of Dr.Kotha and also presented my work in a national conference.Took two graduate level courses, Time Series Econometrics and Financial Econometrics.	Apr. 2016 – Mar. 2017 Indore, India

HONORS AND AWARDS

Bettye Anne Busbee Case Fellowship, Florida State University, Tallahassee, FL	Apr. 2021
Clara Kibler Davis Award, Florida State University, Tallahassee, FL	Apr. 2021
Awarded a travel grant to attend a conference, Florida State University, Tallahassee, FL	Oct. 2019
Awarded Dean's Scholarship, Florida State University, Tallahassee, FL	Aug. 2018
First rank holder in Msc. Computational Finance, IoMA, India	Jun. 2016
Awarded Certificate of Merit in Mathematics, St. Joseph's High School, India	Feb. 2011

PUBLICATIONS

- S. Bose, and I. Ekren, Kyle-Back models with risk aversion and non-Gaussian beliefs, arxiv:2008.06377, submitted to Annals of Applied Probability.
- K. Kotha and S. Bose, Hedging Effectiveness of cross-listed NIFTY index futures (2019), Global Economy Journal vol. 19, issue 02
- K. Kotha and S. Bose, Dynamic Linkages between Singapore and NSE listed NIFTY Futures and NIFTY Spot Markets (2016), The Journal of Prediction Markets, Vol. 10 No. 2

TALKS AND PRESENTATIONS

- 2021 SIAM Annual Meeting, July, 2021, Virtual
- AMS 2021 Spring Southeastern Sectional Meeting, March, 2021, Virtual
- 2021 Joint Annual Meetings, MAA-FL/FTYCMA, February, 2021, Virtual
- Florida State University Financial Math Seminar, February 2021, Virtual
- Advanced Topic Examination Talk, October 2020, Virtual
- Learning Seminar on Regret Minimization, Florida State University, Fall 2019
- Poster presentation in Graduate Student Research Week (GSRW), March 2019, Florida State University, Tallahassee, FL
- Poster presentation in 21st Annual Financial Mathematics Quant Symposium, February 2019, Florida State University, Tallahassee, FL
- 53rd Annual Conference of The Indian Econometric Society (TIES), December 2016, NISER, India.

CONFERENCES ATTENDED

- 2021 Joint Mathematics Meeting (AMS, MAA), Jan. 2021, Virtual.
- Talk series by the SIAM Activity Group on Financial Mathematics and Engineering (SIAG/FME), Apr. 2020 – Dec. 2020, Virtual.
- Bachelier Finance Society One World Seminars, Apr. 2020 – Dec. 2020, Virtual.
- The Second Joint SIAM/CAIMS Annual Meeting (AN20), Jul. 2020, Virtual.
- 4th Eastern Conference on Mathematical Finance, Oct. 2019, Boston University, Boston, MA.
- Finance and Economics Conference FINECON2015, Dec. 2015, International Management Institute, Kolkata, India.

SKILL DEVELOPMENT OPPORTUNITIES

2021 Data Science Bootcamp

May 2021

Erdos Institute

Virtual

- Developed a strong understanding of machine learning concepts and implemented the codes using python

IAQF Annual Academic Competition 2020

Jan. 2020

Department of Mathematics, Florida State University

Tallahassee, FL

- Was selected as a member of the school team “Lucky charms”.
- The goal was to find statistical differences between democratic portfolio and republican portfolio through non-parametric tests and to construct structured notes from the portfolios which have a differentiated payoff depending on the outcome of the election.

IAQF Annual Financial Engineering Competition 2019

Jan. 2019

Department of Mathematics, Florida State University

Tallahassee, FL

- Was selected as a member of the school team “Unconquered”.
- The goal was to predict the future change in the credit spread. The two main learning frameworks used were SVM and LSTM Neural Networks. We also developed an ARIMA model of the data to use as a benchmark for our learning models.

Intern

Jul. 2017 – Feb. 2018

Indian Statistical Institute

Kolkata, India

- Pursued a reading course in basic measure theoretic probability.

SERVICE

Member of FSU Mathematics Graduate Student Council

Feb. 2020 – Present

Department of Mathematics, Florida State University

Tallahassee, FL

- Served as the liaison between the math department faculty and graduate students
- Interacted with prospective and incoming graduate students to answer their questions.

Volunteer, Math Fun Day

Feb. 2020

Department of Mathematics, Florida State University

Tallahassee, FL

- Helped with managing the Fractals room and building 3D fractals with K-12 kids.

Volunteer, “Analytica”

2012 and 2013

Department of Mathematics, St. Xavier’s College (Autonomous)

Kolkata, India

- Actively volunteered in the annual seminar of the Department of Mathematics

TECHNICAL SKILLS

Languages: Python, C/C++, MATLAB (For numerical analysis problems), SAS, EViews(Time Series models)

LANGUAGES

English (Fluent), **Bengali** (Native), **Hindi** (Fluent)