Rajdeep Das

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EDUCATION

The University of Chicago   **Chicago, IL**
Master of Science in Financial Mathematics   **Expected December 2025**
- Courses: Probability & Stochastic Processes, Portfolio & Risk Management, Python, Option Pricing
- Awarded the Maroon Scholarship

Indian Institute of Technology-Delhi (IIT-D)   **Delhi, India**
Bachelor of Technology in Mathematics & Computing (GPA: 3.63/4.0)   **May 2023**
- Courses: Probability Theory, Statistical Methods, Data Structures and Algorithms, Intro. to Financial Institutions and Markets, Linear Algebra, Linear Optimization
- Awarded Semester Merit Award, Secured All India Rank of 308 in IIT-JEE(Adv) among 160K candidates

SKILLS

Computing: C++, Python, Jupyter, R, MATLAB, Java, Unix/Linux, Git, MS Office
Knowledge: Financial Markets, Machine Learning, Time Series Analysis, Statistical Modelling, Data Analytics
Other: Options 101-Akuna Capital, Financial Engg. & Risk Management-Columbia, ML in Finance-NYU (Coursera)

EXPERIENCE

Wells Fargo International Solutions Private Ltd   **Hyderabad, India**
Program Associate/ Software Engineer   **July 2023 – August 2024**
- Incorporated emerging technologies into mainstream banking uses as part of the Digital Technology and Innovations team including but not limited to natural language processing, computer vision, augmented reality
- Explored implementation and effects of 4-bit / 8-bit quantization of Large Language Model (Llama-2) on various tasks such as question answering, information extraction, summarization solely using CPU on GCP to reduce resource usages by up to 50%. Received Manager Spotlight Award for the same
- Showcased innovation on prototypes of AR based bill payment solution and algorithmic conversion of digital flowchart to more computer-processable formats using computer vision to allow simpler extraction of information

Nokia Telecommunications   **Noida, India**
Data Science Intern   **August 2022 - October 2022**
- Studied on-field parameter and fault signal correlation under Nokia's Radio Frequency (RF) Optimization Project
- Utilized immense raw source data files and applied Data Analysis to determine prime factors leading to faults being raised, automating a process previously done manually by engineers thereby reducing network downtime

MateRate Education   **New Delhi, India**
Machine Learning Research Intern (Remote)   **December 2021 - June 2022**
- Improved enterprise's existing pipeline for handwritten image recognition to make it more suitable for mathematical symbols using PyTorch by skimming current research and incorporating their techniques
- Achieved ~2% improvement in accuracy through experiments involving Gaussian blurring, de-skewing, de-slanting input images by extensively testing on both public datasets as well as on raw self-written images

RESEARCH & PROJECTS

Financial Modelling   **January 2024 - present**
- Independently covered important financial concepts and implemented many of them in Python using Jupyter such as option pricing modelling, volatility modelling, VAR modelling, yield curve modelling

Financial Crisis Analysis, (Economic Growth and Distribution, IIT-D)   **February 2023 - April 2023**
- Collaborated in a team of 3 to make a research-based report on onset, unravelling and effects of Global Financial Crisis of 2008 by analyzing key economic factors. Particularly explored consequences of the same for India

Finance Exploratory Project, (Intro. to Financial Markets, IIT-D)   **March 2022 - April 2022**
- Led team of 5 in analyzing success of digital payments in India in form of unified payments interface. Surveyed more than 100 people to statistically determine most significant success factor for their widescale acceptance

Programming Projects, (IIT-D)   **September 2021 - April 2023**
- Coded gradient descent, Linux shell using C, N-gram sentence completion model, memory allocation algorithms

EXTRACURRICULARS & OTHER INFORMATION

Languages: Hindi (fluent), Bengali (fluent), Spanish (basic)
Interests: Chess (nationals; college club), Quizzing (college club), Poker, Flute, Swimming, Table Tennis, Lawn Tennis