Siddhant Shah

Boston, MA | sidshah2953@gmail.com | (857) 919 5600
siddhants.com | linkedin.com/in/siddhant-d-shah

I am a professional in data analytics, with a background in computer science and mathematics, and am currently enrolled in Boston University's Master of Applied Data Analytics program. I have proven my ability to use data to find commercial possibilities and improve decision-making, especially in the financial industry. Adept in project management, education, and working with people in a variety of settings, I have experience in extracting useful insights from complex analytical tools and methods, such as Python, PySpark, and Power BI.

Education

Boston University
Boston, MA, USA
September 2024 – Present

Master of Science (MS) in Applied Data Analytics

- Analysis of Algorithms (CS 566); Data Science with Python (CS 677)
- Foundations of Analytics and Data Visualisation (CS 544); Foundations of Machine Learning (CS 555)

Chennai Mathematical Institute
Chennai, TN, India
September 2021 – July 2024

Bachelor of Science (Hons) - Mathematics and Computer Science

- Linear algebra, Exterior & Tensor algebra, Group theory & Ring theory; Analysis of multi-variate real-valued functions, Fourier Analysis; Differential Equations; Topology
- Design & Analysis of Algorithms, Theory of Computation – Finite state automata, pushdown automata and Turing machines.
- Probability Theory - expected values, standard deviation & variance; Stochastic Processes; Statistical Inference
- Linear Programming; Theoretical Foundations of Machine Learning; Data Mining & Machine Learning; Applied Machine Learning (MLOps); Financial Modelling with Python; Economics

PACE Junior Science College
Mumbai, MH, India
May 2019 – September 2021

Grade 12 (Maharashtra HSC)

- Percentage: 94.5% (12th Grade, HSC Maharashtra Board)
- JEE Mains (All India Rank 5274) & Advanced (All India Rank 4690)

Experience

Maths Circle | Raising A Mathematician (RAM) Foundation
Mumbai, MH, India
July 2024 – August 2024

Program Operations Intern

- Analyzed applicant data to identify most viable locations for initial chapters.
- Spearheaded the establishment and start of the Maths Circle Initiative in Chennai; received 300 applicants from the greater Chennai area, accepting 35 students
- Lead a team of problem setter, created question papers for various RAM Examinations.
- Analyzed applicant data to identify most viable locations for initial chapters.

Skills Used: *Data Analysis, Python, Microsoft Excel, Confluence, Jira*

Science Enrichment Program | Mumbai Science Teachers Association
Mumbai, MH, India
July 2021 – August 2024

Mathematics & Physics Teacher

- Helped students prepare for the various stages leading up to the International Junior Science Olympiad, one of whom won a gold medal for Team India at the International Biology Olympiad in 2024.
- Prepared and implemented lesson plans covering required course topics.

Skills Used: *Teaching, LaTeX, Communication*

Fino Payments Bank
Navi Mumbai, MH, India
May 2023 – July 2023

Data Analytics Intern

- Created a database of over 6000 active government-sponsored schemes, distributing over INR 20.000,000,000.
- Worked in PySpark, to identify potential revenue streams that could double revenue in the upcoming years.
- Performed a cost-to-benefit analysis, drafted a proposal for a nation-wide marketing plan to promote government-sponsored-scheme-related services offered by the bank.

Skills Used: *Data Analysis, NumPy, Pandas, PySpark*

Chennai Mathematical Institute
Chennai, TN, India
Teaching Assistant
August 2023 – January 2024
- Acted as a Teaching Assistant for 3 courses – Classical Mechanics 1, Design and Analysis of Algorithms for Data Science (ADT) (for Masters' students), Design and Analysis of Algorithms (ALGO).
- Also acted as a Teaching Assistant for the Design and Analysis of Algorithms (DAA) Course conducted via NPTEL from May 2023 till July 2023, and January 2024 till March 2024.

Skills Used: *Teaching, LaTeX, Communication*

Projects

Probabilistic Programming (Pyro)
Chennai, TN, India
Done under the supervision of Prof. G Philip, Chennai Mathematical Institute
August 2023 – August 2024
- Utilized Pyro, a PyTorch-based framework in Python, for exploring tools and techniques
- Implemented Bayesian Regression using Stochastic Variational Inference and Hamiltonian Markov Chains.
- Currently working on insights from a larger medical dataset, published and maintained by HFEA (UK), aimed at contributing valuable information for medical professionals and patients.

Skills Used: *Data Analysis, Pyro, PyTorch, NumPy, Pandas, PySpark*

Business Analyst Experience Program
Online
Finlatics
January 2024
- Understood research, types of data analytics, their usage and the benefits of data driven decision making across industry segments like FMCG, e-Commerce, Manufacturing, Technology and Banking.
- Assessed business projects and proposed solutions using data driven decision making.
- Solved case problems of technology-oriented businesses with a goal to improve their profitability.
- Learnt Power BI and how it can be used as an intelligence tool to gain insights on a business.

Skills Used: *Business Analysis, Power BI, Microsoft Excel*

Leadership & Achievements

Tessellate 2024 | Chennai Mathematical Institute
Chennai, TN, India
Overall Coordinator
October 2023 – May 2024
- Presented budgets, created marketing strategies, and designed merch.
- Coordinating with vendors, sponsors and management and handling all income streams to ensure smooth operation.

Skills Used: *Leadership, Business Analysis*

KVPY Fellowship Award
2019
- Secured an All-India Rank 328 in the Kishore Vaigyanic Protsahan Yojana Aptitude Test 2019 and Interview 2020.
- Appointed as an INSPIRE Fellow by the Department of Science & Technology, Government of India, and the Indian Institute of Science.

Regional Mathematical Olympiad
2017
- Received a Certificate of Merit and attended a training camp to participate in the Indian National Mathematical Olympiad

Skills & Additional Courses

Programming Languages
- Python – NumPy, Pandas, Polars, PySpark, PyTorch, MatPlotLib, Seaborn, PyGWalker, Flask, Django
- C, Java, JavaScript – Astro, Node.JS, React.JS

Markup Languages
- LaTeX & Markdown
- HTML & CSS – Sass

Additional Courses
- Finance & Quantitative Modeling for Analysts | University of Pennsylvania (Wharton) via Coursera | January 2024
- Decentralized Finance (DeFi) Primitives | Duke University via Coursera | July 2023
- Principles of Corporate Finance | MIT OCW | August 2022
- CS50: Introduction to Computer Science | Harvard via EdX | September 2021