Shaik Jameel Ur Rahaman

Third Year Undergraduate
Department of Computer Science and Engineering

Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2023 - Present	B.Tech	Indian Institute of Technology Kanpur	7.5/10.0
2023	Class XII (CBSE)	Sri Chaitanya Vidya Niketan	94.6%
2021	Class X (State Board)	Sri Chaitanya EM School	10/10

Scholastic Achievements

- Secured All India Rank 670 in JEE Advanced 2023, conducted by IIT Guwahati, among 2,00,000 shortlisted candidates.
- Successfully secured All India Rank 398 in JEE Mains 2023, conducted by NTA, among 11,00,000 appeared candidates.
- Secured Rank 448 in AP EAPCET 2023 among 2,38,000 candidates(entrance test for UG courses in Andhra Pradesh).
- Secured Rank 130 in TS EAMCET 2023 among 1,95,000 candidates (entrance test for UG courses in Telangana state).
- Secured All India Rank 2261 in Kishore Vaigyanik Protsahan Yojna (KVPY) 2021-22, conducted by IISc Banglore.
- NTSE Scholar Qualified NTSE, securing a position in the National Top 2000 out of 1 million students across the country.
- Qualified AS RAO Olympiad, securing a position in the National Top 170 out of 1 million students across the country.

Key Projects

Eventrix | Course Project, CS253, Prof. Indranil Saha | CSE, IIT Kanpur | 🔾

Jan'25-Apr'25

- Collaborated in a 10-member team to successfully develop a **MERN-stack** web app for an on-campus event manager platform.
- Built and maintained **RESTful APIs** for user authentication, admin tools, event handling, and various user operations.
- Developed core modules including **JWT** authentication, real-time updates, live events page, and automated email alerts.
- Implemented role-based access, implemented secure password hashing, and used Cloudinary for dynamic image uploads.
- Integrated MongoDB for backend database for event data, Express.js and Node.js to build a secure server-side API.

Geopulse | Course Project, CS661, Prof. Soumya Datta | CSE, IIT Kanpur | 🗘

Jun'25-Ongoing

- $\bullet \ \ {\rm Designed} \ \ {\rm and} \ \ {\bf VTK.js} \ \ {\rm to} \ \ {\rm explore} \ \ {\rm global} \ \ {\rm development} \ \ {\rm indicators}.$
- Visualized datasets like population vs poverty, INR vs USD, and malnutrition trends with dynamic graphs and 3D plots.
- Implemented custom interactive charts and spatial maps to represent urbanization and migration patterns across the world.
- Utilized Python-based ML models to highlight complex correlations and anomalies in economic and demographic datasets.
- Optimized data workflows using Python and integrated lazy loading in React to ensure smooth performance on Big Data.

Mini Mips Processor | Course Project, CS220, Prof. Debapriya Basu Roy | CSE, IIT Kanpur | • Mar'25-Apr'25

- Architected a IITK mini-MIPS single-cycle processor supporting a custom 48-instruction subset of the MIPS ISA.
- Assembled register files, instruction memory, **FSM** for the **control signals**, and a floating point-to-integer conversion module.
- $\bullet \ \ {\bf Designed} \ \ {\bf and} \ \ {\bf implemented} \ \ {\bf the} \ \ {\bf ALU} \ \ {\bf and} \ \ {\bf FPU} \ \ {\bf using} \ \ {\bf a} \ \ {\bf top-down} \ \ {\bf approach} \ \ {\bf to} \ \ {\bf handle} \ \ {\bf R-type}, \ \ {\bf J-type} \ \ {\bf instructions}.$
- Successfully mapped insertion sort algorithm, integer multiplication, and floating-point Subtraction directly onto an FPGA.

Library Management System | Course Project, CS253, Prof. Indranil Saha | CSE, IIT Kanpur | 🔾

Feb '25

- Developed a Library Management System as an interactive command-line application in C++, using core OOPS principles.
- Implemented book borrowing, availability checks, and accurate fine calculation using **inheritance** and **polymorphic** classes.
- Designed a structured text-based interface for book tracking, user management, and transaction processing via commands.

Breaking Code | Mentored by Association for Computing Activities, IIT Kanpur |

May'24-Jun'24

- Tackled challenges on core DSA concepts—sorting, graph traversal, dynamic programming, greedy strategies, and recursion.
- Engineered optimized C++ solutions with a strong emphasis on time and space efficiency, code readability, and scalability.
- Collaborated in competitive coding contests to debug, refine logic, and efficiently handle edge cases under time constraints.

Competitive Programming

- Proficient Competitive Programmer with a peak Codeforces rating of 1586 (Specialist) (III shaikjameelurrahaman)
- Achieved a Global Rank of 1057 in Codeforces Round 1028 (Div. 2) among 35,000+ international participants.

Technical Skills

Programming Languages	C C++ Python Verilog HDL JavaScript HTML CSS MIPS Assembly
Libraries and Frameworks	Numpy Pandas Matplotlib Librosa Scikit-Learn React.js Express.js
Software and Utilities	Git Xilinx Vivado QtSpim Figma Canva LaTeX

Relevant Courses *: Ongoing

Data Structures & Algorithms	Software Development and Operations
Fundamentals of Computing	Introduction to Computer Organisation
Probability for Computer Science	Linear Algebra
Big Data Visual Analytics*	Introduction to Electronics
Discrete Mathematics	Logic for Computer Science

Extra Curricular Activities

• Served as a cadet in the National Cadet Corps (NCC) under the 2 UP Composite Technical Regiment (2UPCTR).