Akshit Arora

Engineering Physics

Indian Institute of Technology Delhi

2023 - 2027

B.Tech

Male

Examination	University/School	Year	CPI/%
B.Tech in Engineering Physics	IIT Delhi	2023-27	8.05
Central Board of Secondary Education	Navyug Convent Sr. Sec. School	2023	95
Central Board of Secondary Education	Blue Bells Public School	2021	95

SCHOLASTIC ACHIEVEMENTS

- **KVPY 2021 (Issued by IISC)**
  Secured rank 1197 among 100000 candidates
- **JEE MAINS 2023**
  Secured rank 2695 among 1000000 candidates
- **JEE ADVANCED 2023**
  Secured rank 2562 among 250000 candidates
- **HackXtreme IITD 2023 Finalist**
  Secured a top 8 spot out of 756 teams, showcasing innovative skills in a Machine Learning project implemented on webapp
- **International Stem Olympiad (ISTO) 2019**
  Secured Haryana rank 1 among 22000 candidates
- **Concours Romain Rolland (Issued by L'Alliance Française)**
  Secured state rank 2 among 16000 candidates

PROJECTS

- **EightFold AI Resume Structuring and Recommendation Analysis (React, Flask, TailwindCSS, Llama-70B, ONNX, Milvus)**
  I processed over 10,000 resumes and analyzed more than 1,000 recommendation letters to assess skill relevance and detect fraud using DFS-based algorithms. I built a hiring score model that integrates influence scores based on factors such as job role, company size, and tenure. Additionally, I implemented both semantic and keyword search capabilities using MiniLM-L12-v2 and BM25, optimized with ONNX runtime and Milvus for efficient vector search. The system was scaled using AWS Lambda, handling millions of tokens at a cost of 0.90 dollars per million.
- **CarePulse - HealthCare Management System (Next.js, TypeScript, React, TailwindCSS, Appwrite, ShadCN) (Live Project):**
  Patient Management and Appointment Scheduling: Built a patient management system with appointment scheduling and an admin panel for managing appointments.
- **Neural Network for Image Recognition Using NumPy from scratch**
  Engineered a neural network from scratch using NumPy, achieving more than 90% accuracy on the MNIST dataset with 60,000 training samples. Optimized performance through gradient descent with momentum and batch normalization techniques, demonstrating proficiency in deep learning fundamentals and numerical computation.

TECHNICAL SKILLS

- **Programming & Scripting Languages**: C, C++, JavaScript, Python, HTML, CSS, ReactJS
- **Machine Learning Frameworks**: NumPy, Pandas, Scikit-Learn, PyTorch, TensorFlow

WORK EXPERIENCE

- **DataCurve - Y Combinator W24 (Remote)**
  DSA Problem Setter and Reviewer -
  Problem Solving: Create and design DSA problems for the platform Shipd, which are used to train Large Language Models, ensuring a range of difficulty levels to challenge and enhance model capabilities in problem-solving.
- **Web Development and Design Team (iGEM Biotech Club of IIT Delhi, Website)**
  Led frontend development using HTML, CSS, and JavaScript to design and implement two pivotal pages for the iGEM Biotech club website. Focused on creating visually appealing and user-friendly interfaces that effectively communicated the club's mission and activities.
- **Frontend and Design for BECON (EDC Fest of IIT Delhi)**
  Took charge of frontend development using React.js, HTML, CSS, and JavaScript for the BECON (EDC Fest). Designed intuitive and engaging interfaces tailored to enhance attendee interaction and experience during the event, reflecting the entrepreneurial spirit and goals of the fest.
- **Backend for Login Pages for NSS Website (NGU Portal of IIT Delhi) using MERN Stack**
  Engineered backend functionalities for login pages on the NSS website (NGU Portal) using the MERN (MongoDB, Express.js, React.js, Node.js) stack. Implemented user authentication, session management, and data encryption to ensure robust security measures and seamless login experience for users within the university community.

POR & EXTRA-CURRICULARS

- **Academic Mentor - COL100**: Academic Mentor for COL100 - 'Introduction to Computer Science' course at IIT Delhi.
- **Executive - DevClub IITD**: Executive at the development club in IIT Delhi
- **iGEM (Biotech Club, IIT Delhi) CAIC**: Wiki Design credits, tech team, for website of iGEM