Akash Saini

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EDUCATION

Birla Institute of Technology and Science, Pilani (Pilani Campus)
Integrated Master of Science in Mathematics | Aug 2019 – May 2023 | ***CGPA: 6.49***

Birla Public School, Pilani
Class XII | *2019*| ***CGPA: 8.5***
Class X |*2017*| ***CGPA: 9***

EXPERIENCE

UPSC CSE Aspirant   **Jun 2023 – Present**
- Studying and synthesizing vast amounts of information from diverse subjects, including history, polity, economics.
- Balancing extensive exam preparation with self-discipline and adherence to a structured study schedule.
- Developed problem-solving abilities through critical analysis of real-world case studies.
- Enhanced research and writing skills by preparing detailed notes, and summarizing complex topics effectively.
- Strengthened interpersonal and communication skills by participating in group discussions, debates.
- Cultivated leadership and decision-making qualities through the study of public administration and governance principles.

Software Development Intern / *PCHF*   **Jul 2022 – Dec 2022**
- Piramal Capital and Housing Finance is a NBFC offers personalized financing solution to customers.
- Resolved 40+ bugs to enhance service reliability, improving code by writing Java unit tests and increasing code coverage.
- Developed and implemented a validation check to prevent malicious file uploads, ensuring data security.
- Designed and deployed APIs to update loan statuses and created Python/MongoDB scripts for database management.
- Writing custom code in JAVA aligned with business requirements, ensuring compliance and operational efficiency.
- Investigated root causes of high access token expiry times, introducing fixes and created alerts to detect service downtimes.
- Performed root cause analysis for duplicate customer entries, developing a duplication check to ensure unique customer.
- Collaborated in an Agile environment, following SCRUM practices with end-to-end ownership of features.

Data Analysis Intern / *World Development Organization*   **Nov 2021 - Jan 2022**
- Collected NGOs data from GoI website using data mining and web scraping (BeautifulSoup) techniques in Python.
- Did EDA, data-cleaning, pre-processing, used lookups and pivot tables and created interactive dashboards in Power BI.

Machine Learning Engineer Intern / *Swecha*   **May 2021 - Jul 2021**
- Collaborated under the Free Software Movement of India by Swecha, contributing to open-source development.
- Led a team of 10 members in developing "Swecha Voice," a speech recognition system leveraging Python libraries such as PyAudio and SpeechRecognition.
- Enhanced data collection processes by modifying the Speech Corpus to dynamically extract data from books.
- Implemented web scraping techniques to automate data collection from internet, increasing database size by over 6000 times.

PROJECTS

Fake News Detection on Social Media / *Natural Language Processing*   **Jan 2022 - Feb 2022**
- Used NLTK and compared LR, SVM, NB, DT, RF for Real-Fake news classification on PolitiFact and GossipCop data.

Flight Delay Dashboard / *R Shiny Dashboard*   **Aug 2021 - Sep 2021**
- Part of a 2-Months workshop on R Programming. Graphically shows delay rates, reasons, performance of airlines.

Statistical Analysis and Forecasting of Solar Energy / *Time Series Analysis*   **Mar 2021 - Apr 2021**
- Did EDA and comparative analysis of AR, MA, ARMA, ARIMA, SARIMA on 5 Indian states' 15 years energy data.

Impact of Immediate change in Virtual Learning Transition/ *Research*   **Jan 2021 - July 2021**
- Analyzed the advantages and disadvantages of virtual learning, proposed solutions to bridge the gap between virtual and traditional education, and developed effective learning practices for an optimized educational experience.

RESPONSIBILITIES

Events Team Member / *Pilani Innovation & Entrepreneurship Development Society, BITS Pilani*   **July 2021 - April 2023**
- Organized and executed entrepreneurial workshops, attracting participation from students, startups, and industry professionals.
- Promoted events through social media, email campaigns, and campus outreach, resulting in increased participation.

Head of Operations / *Nirmaan Organization*   **Aug 2019 - June 2023**
- Oversaw the smooth functioning of a fully student-run non-profit organization, leading teams of 100+ volunteers across multiple operations and projects with a focus on youth employment and skill development.
- Coordinated COVID-19 relief initiatives by collaborating with Pilani Government Hospital to facilitate vaccinations for 150+ villagers and organized the distribution of ration kits to over 200 families, ensuring essential support during lockdowns.
- Organized and led workshops and training sessions on entrepreneurship, equipping local youth with skills to develop business ideas, launch their own ventures, and create sustainable livelihoods, and self-reliance within communities.
- Collaborated with local entrepreneurs and industries to connect youth with employment and internship opportunities, strengthening the local economy.
- Worked on research and documentation, ensuring proper implementation of Nirmaan's projects aligned with government schemes aimed at fostering youth employment and entrepreneurship in nearby villages.
- Designed and implemented sustainable development projects, driving long-term impact and community empowerment.

Head of Data Science Team / *Mathematics Association*   **Aug 2021 - Jun 2022**
- Founded and Headed the data science group of 10+ members. Written blogs on campus and non-campus data analysis.

Teaching Assistant / *Academic Undergraduate Studies Division*   **Aug 2021 - Jun 2022**
- Handled day-to-day departmental work, student registrations, and maintenance of graduated students' grade records.

Member / *Student Faculty Council*   **Aug 2020 - Dec 2020**
- Responsible for providing feedback and raising problems faced by 80+ Mathematics department students to professors.

Entrepreneurial Experience

AgroGreenLives / *New Venture Creation Course*   **Aug 2021 - June 2022**
- Co-founded AgroGreenLives, a plant health startup, as part of the New Venture Creation course at BITS Pilani, focusing on developing a business model to address plant health diseases.
- Collaborated with a team of five to create and refine the business strategy, under the mentorship of Dr. Shaili Singh.
- Directed business development initiatives by conducting in-depth market research to analyze trends and challenges in the agricultural technology sector, identifying growth opportunities, and formulating strategies to address plant health.
- Developed and implemented data-driven solutions for plant disease management, utilizing skills in computer programming and data science to improve plant health outcomes.
- Engaged in continuous iteration and feedback, refining the product and business model based on expert guidance.

Technical Proficiency

Java, Python, MySQL, R Programming, C Programming, LaTeX, Grafana, PowerPoint, Digital Marketing, Excel, MATLAB

Languages Known

English , Hindi , Marwari(Rajasthani)