Kanishka Ranjan

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SKILLS

Languages: C++, JavaScript, TypeScript, SQL, Python, Java, Linux Shell Script, PowerShell
Technologies/Frameworks: React.js, Next.js, Tailwind, Node.js, Express.js, Socket.io, Nest.js, AWS, Docker, Linux, Git, GitHub, Cloudflare Workers (Serverless), GCP, PyCharm, Terraform
Databases/Libraries/Concepts: MongoDB, PostgreSQL, Firebase, Prisma, Pandas, NumPy, Matplotlib, CV2, TensorFlow, Scikit-learn, Data Structures and Algorithms, DBMS, Machine Learning, OS, CN, Distributed Systems

WORK EXPERIENCE

TECHCITI   **Jan 2024 – July 2024**
Full Stack Web Developer

- **Architected and launched** a scalable Customer Feedback & Support System from scratch, enabling seamless feedback and ticket submissions for 500+ users and slashing average response times by 45%, directly boosting customer satisfaction scores.
- **Designed and engineered** an interactive Admin Dashboard featuring advanced filtering, real-time analytics, and automated alerting via Nodemailer, which automated 70% of manual follow-ups and proactively resolved 85% of recurring support issues.
- **Revamped and optimized** MongoDB data models and implemented strategic indexing, accelerating query performance by 55% and ensuring the platform reliably scaled to accommodate a 3x increase in data volume without performance degradation.

EDUCATION

NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA   **Nov 2021 – May 2025**
Bachelor of Technology in Information Technology   **CGPA- 7.71**

PROJECTS

JARVIS – VOICE ASSISTANT   LINK
- Developed an **AI-based Voice Assistant, JARVIS,** using **Python** and **OpenAI's GPT-3** model**,** achieving **95%** accuracy in voice recognition and enabling seamless **natural language processing** for conversational AI.
- Implemented features for voice interaction and text-based chat, storing over **1,000** conversation records in organized ".txt" files for easy retrieval and analysis.
- Optimized system response time to under **1.5** seconds by leveraging **Python libraries** like **Speech Recognition** and Pyttsx3, Pywin32 enhancing user experience and real-time interactions.

AGRO-TECH WEBSITE   LINK
- Designed and developed a fully responsive website, utilizing React.js and CSS for engaging frontend experience. Implemented backend logic with **Node.js** and **Flask**, optimizing data handling for smooth and efficient user experience.
- Leveraged **MongoDB** and **Firebase** for scalable and secure data storage, enabling fast retrieval and seamless integration. Created a crop recommendation model using **Naïve Bayes** and a fertilizer prediction model with **Random Forest** models.
- Implemented a **CNN** for plant disease identification across **157,000 images** and **38 classes**, aiding in accurate diagnoses.

PIXEL ALCHEMY   LINK
- Developed an **AI-powered text-to-image generation platform** using the **Gemini API**, enabling users to create high-quality, unique images from descriptive text inputs in real-time.
- Implemented seamless payment integration with **Razor pay**, allowing users to securely purchase credits required for generating images.
- Built a user-friendly full-stack application with the **MERN** stack, featuring full authentication, intuitive prompt-based inputs, and options to **download** or **share** creations instantly.

DOODLE SPACE   LINK
- Developed a **Collaborative Drawing App** using **MERN** stack with **real time collaboration** features powered by **Socket.io**
- Enabled users to **create**, **collaborate** and **share whiteboards** in real time.
- Overcame challenges related to real-time synchronization and communication using Socket.io

ACADEMIC AND EXTRA-CURRICULAR ACHIEVEMENTS

- Solved **350+** problems on LeetCode.
- Winner of the institute round of **Google Cloud Solve** for India hackathon. College Finalist in **Smart India Hackathon 2023**.
- Secured **AIR 7138** in JEE MAINS 2021.
- **Secretary,** Hiking & Trekking Club, NIT Kurukshetra.
- Led a team of 60 members at **PhysicsWallah**, resulting in a **20%** increase in event participation.