

Saksham Agarwal

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EXPERIENCE

Patenti Technology solution.....
Software Development Engineer Feb 2024 - Sep 2024, Internship

- Engineered a dynamic **data pipeline** using **Pandas** and integrated **AWS S3** for seamless data extraction, transformation, and management, enhancing processing efficiency and timing by **50%** through **threading optimization** ensuring rapid and reliable data handling.
- Developed the **data visualizations** using **Google Charts** within **Django**, enabling more robust data-driven insights from **AWS S3**.
- Enhanced product functionality by incorporating a **robust logging mechanism** that ensures comprehensive tracking and **debugging capabilities** and also leveraged the **OpenAI API** for advanced summarization and data extraction improving data processing and results
- Implemented a **MySQL model** for efficient **metadata management**.
- Designed and implemented a **full-scale comprehensive subscription model** for B2B product delivery, improving customer engagement.

Aristiun.....
Software Development Engineer May 2024 - August 2024, Internship

- **Architected a real-time monitoring system** with a scalable design by implementing **threading** to enable **parallel computation** of various tasks, ensuring rapid **processing high volumes of data in real-time**
- Implemented **Apache Kafka** to optimize **data streaming** and to prevent **server-side lag on Google Cloud Platform (GCP)** and data loss.
- Integrated **Cassandra DB**, achieving a **20 percent** reduction in query response and data feeding time, and later transitioned to an **AlloyDB cluster** facilitating easier deployment and management on **GCP**, while maintaining high performance and scalability.
- Utilized **Work Manager and local caching** to ensure functionality and to prevent data loss during network outages.

Fyzen Career Solution.....
Backend Developer Apr 2023 - May 2023, Internship

- Developed a **dynamic coupon system** in **MERN**, for the company to enhance customer engagement and boosting sales by 30%.
- Integrated the system with the **backend using REST APIs** and applied **CSRF tokens** to ensure seamless interaction with the **database**.
- Designed and coded a **backend module scheduler** that fetched relevant data from the company's database for personalized emails

Course Projects

Two Way Integration App.....

- Developed a **two-way integration system** between **SQLAlchemy** and **Stripe** using **Python and Kafka** messaging. Implemented inward sync connecting stripe and SQL using **Ngrok** and created **webhook API**

BorderPay.io Cross Border Contractual Payments.....

- Developed a blockchain-based platform using Hyperledger Fabric, with a frontend built using HTML, React.js, and CSS, to create, manage, and execute financial contracts and payrolls, supporting both local and cross-border payments.

EDUCATION

Bachelor of Technology
IIT Kanpur, India, 2021-2025
12th Grade, Ben Hur Public School
Pilibhit, UP, Percentage: 93.8%
10th Grade, Ben Hur Public School
Pilibhit, UP, Percentage: 91.2%

SUMMARY

Experienced Software Engineer with expertise in backend development, data engineering, and system optimization. Skilled in MERN stack, Django, and AWS, with a proven ability to enhance performance and integrate advanced APIs. Adept at solving complex problems and driving impactful results in fast-paced environments.

SKILLS

Languages: Javascript, Python, C++
Backend: Expressjs, Flask, Django
Frontend: React.js, Next.js, CSS, jQuery
APIs: REST API, Axios
DevOps: Docker, Kubernetes
Databases: Firebase, MySQL, PostgreSQL, MongoDB, Cassandra, AlloyDB
Cloud: AWS S3, EC2, Looker studios
Soft Skills: Resilience, Attentiveness

Courses

- Embedded Cyber-Physical System
- Software Development Operations
- Integrated Product Development
- Introduction to Machine Learning
- Data structure and Algorithm
- Fundamental of Computing

Postion of Responsibilities

- UG manager, AnC
- Marketing Organizer, Udghosh
- Web Team, Humanoid
- Organizer Web, Antaragni

Other Curricular Activities

- Patent Applied, Anti Theft Device
- Led a team in CS253