Gaurav Kumar Jain

Mobile: 91+ 8368758492, 9891665634 E-Mail: jaingaurav126@gmail.com

ACADEMIA & CREDENTIALS

2011	Completed B.Tech (**from computer science with 78%**) from M.I.T Bulandshahr,Affiliated to U.P. Technical University, Lucknow (U.P.)
2007	Passed **Senior Secondary** education from Ingraham school (WITH 78%), I.S.C Board.
2005	Passed **Higher Secondary** education from St.Mary's Convent school (with 69%), I.S.C. Board.

Professional Expertise

Technical Packages

- **Python Architect**: Advanced proficiency in designing and implementing scalable and efficient Python architectures for various applications.
- **PHP**: Experienced in developing dynamic web applications and backend services using PHP.
- **WordPress**: Skilled in creating and managing WordPress-based websites, including custom theme and plugin development.
- **React**: Expertise in building interactive and responsive web applications using React.js.
- **Angular**: Proficient in developing single-page applications with Angular, including component-based architecture and state management.
- **.NET**: Knowledgeable in developing robust applications using the .NET framework.
- **SAS Basics & Programming**: Familiar with SAS for statistical analysis, data management, and basic programming tasks.

Cloud Computing

- **AWS**: Advanced skills in deploying and managing applications on Amazon Web Services, including serverless architectures and cloud services.
- **GCP**: Proficient in using Google Cloud Platform for scalable cloud solutions, including Kubernetes and data analytics.
- **Azure**: Experienced in leveraging Microsoft Azure for cloud computing, including virtual machines, app services, and Azure DevOps.

Data Analysis & Science

- **Data Analysis**: Expertise in analyzing complex datasets using tools like Excel and Power BI to derive actionable insights.
- **Data Science**: Extensive experience in data science methodologies, including data preprocessing, statistical analysis, and model building.

DevOps & Automation

- **Kubernetes**: Skilled in deploying and managing containerized applications using Kubernetes.
- **Terraform**: Proficient in infrastructure as code (IaC) with Terraform for managing cloud resources.
- **Docker**: Expertise in containerizing applications with Docker for consistent deployment and scalability.
- **Jenkins**: Experienced in setting up and managing CI/CD pipelines using Jenkins for automated testing and deployment.

Artificial Intelligence & Machine Learning

- **Computer Vision**: Developed various applications for image and video analysis using computer vision techniques.
- **Artificial Intelligence**: Implemented AI solutions for complex problem-solving and automation tasks.
- **Machine Learning**: Built and fine-tuned machine learning models for predictive analytics and data-driven decision-making.
- **Conversational AI**: Created custom chatbots and conversational agents using AI and natural language understanding.
- **NLP**: Expertise in Natural Language Processing for text analysis, sentiment analysis, and language modeling.

- **AI Models**: Developed and trained various AI models for specialized tasks and applications.

Operating Systems

- **Windows 98, XP, Vista**: Experience with older Windows operating systems for legacy application support and maintenance.
- **Linux**: Proficient in using Linux for server management, application deployment, and development.

WORK EXPERIENCE

- Working as a Sr. Software Engineer with Infinite Computer Solutions(India) Limited since last 5 months
- Worked as a Freelance Consultant for 1 year (Sep-2023 to Sep-24) with Future Focus Infotech Pvt Ltd
- Worked for Inspira Enterprise as a Sr Fullstack developer for 1 year (Aug 2022- Oct-2023)
- Worked as TGT C.S (Python trainer) in DPSG for 1.1 year (May 2021- July 2022)
  Reason for leaving: Developed a passion for coding enterprise level applications, learning high end technologies, training professionals on devops tools usage.
- Worked as TGT C.S (Coding Instructor) in Parevartan Ghaziabad for 1.9 Years (2019-2021)
  Reason for leaving: Wanted to work in a well-established organization to learn and explore more.
- *Worked as a Freelance Coder and trainer for 8 years (2011-2019)*

Recent Work

Infinite Computer Solutions

- **Web Application Development & Testing**: Leading the development and rigorous testing of web applications to ensure functionality, performance, and security standards are met.
- **Application Analysis**: Analyzing and optimizing Python and PHP-based applications, identifying areas for improvement, and implementing solutions to enhance performance and reliability.
- **Project Management**: Handling projects across various domains including Cloud Computing and Data Analytics, ensuring that objectives are met and deliverables are aligned with client requirements.
- **Team Leadership**: Leading a team of 3 engineers, providing guidance, mentorship, and support to ensure project milestones are achieved and team performance is maximized.
- **Solution Architecture & Coding**: Designing and implementing solutions for projects involving CI/CD pipelines, DevOps practices, and technologies such as Kubernetes, Docker, Terraform, Python, PHP, and Power BI.
- **Deployment on GCP**: Responsible for deploying applications on Google Cloud Platform's managed Kubernetes services, ensuring scalable and efficient operations in the cloud environment.

Enterprise Projects I have done so far:

a) ONGC CAP:

The ONGC CAP project is a comprehensive portal developed for the Oil and Natural Gas Corporation (ONGC), designed to enhance data management and operational efficiency in the energy sector. It integrates several advanced technologies, including:

- **Elasticsearch** for fast data retrieval.
- **OCR** to digitize historical documents.

- **Web Forms** for data entry.
- **Log Viewers (LAS/DLIS/SEGY)** for analyzing well and seismic data.
- **SAS** for advanced data analysis.
- **MySQL** for structured data storage.
- **Django & HTML/CSS/JS** for a responsive interface.
- **Git** for version control and replication across 13 servers to ensure high availability.

This portal streamlines ONGC's operations, boosts decision-making, and ensures robust, scalable performance.

b) NPS Portal:

The NPS project aimed at resolving SAS (Statistical Analysis System) issues and implementing a CI/CD pipeline for a Liferay-based application. Key tasks included:

1. **SAS Troubleshooting**: Addressed performance bottlenecks, data errors, and integration issues to ensure smooth data processing for ONGC and NPS.

2. **CI/CD Pipeline Setup**: Automated the build, test, and deployment of the Liferay application, integrating tools for version control and testing.

3. **Liferay Application Deployment**: Managed the deployment and updates using the CI/CD pipeline for consistent performance.

4. **Kubernetes & Docker**: Utilized Kubernetes for scaling and managing containerized applications and Docker for maintaining consistency across environments.

5. **Linux VM Management**: Optimized VMs to support container workloads.

Outcome: The project delivered a reliable, scalable, and automated system for deploying the Liferay application, ensuring efficient operations for ONGC and NPS.

c) DIKSHA:

The DIKSHA project involved deploying a government educational website on Google Cloud Platform (GCP), utilizing various DevOps tools for a scalable, reliable, and automated infrastructure. Here's a summary of the key components:

1. **Google Cloud Platform (GCP)**: The primary cloud infrastructure, ensuring scalability, high availability, and performance for hosting the educational content.

2. **Kubernetes**: A Kubernetes cluster was set up across 9 Linux servers for container orchestration, enabling dynamic scaling, load balancing, and automated resource management.

3. **Docker**: Docker was used to containerize the DIKSHA website’s components (web app, databases, microservices), ensuring consistency across environments and seamless deployment on GCP.

4. **Ansible**: Automated the configuration and management of Linux servers and the Kubernetes cluster, ensuring consistency and reducing manual intervention.

5. **Azure Integration**: Provided redundancy, backup, and multi-cloud capabilities, enhancing the platform's resilience and failover capabilities.

6. **Linux Virtual Machines (VMs)**: Hosted the Kubernetes cluster, offering a stable and scalable environment for handling large workloads.

7. **Jenkins**: Automated the CI/CD pipeline, managing the deployment of Docker containers and Kubernetes pods, ensuring rapid and reliable updates.

Workflow:

- Setup of the Kubernetes cluster on 9 Linux servers.
- Docker was used for containerization, and Ansible automated server configurations.
- Jenkins handled CI/CD, automating container deployment and pod creation.

Outcome: The DIKSHA platform achieved high availability, efficient resource management, and automated deployment processes, allowing it to effectively serve a large user base while dynamically scaling with user demand. The infrastructure ensured robustness, reliability, and seamless operation of the educational website.

d) TnEGA : For the Delhi Transport Infrastructure and Development Limited (DTIDC), you developed a Transport Application that leverages **Flask** and **PostgreSQL** to manage and visualize real-time data for Delhi's transport buses.

e) CMD Manipur: Took the handover of the project which involves development of Manipur CM Dashboard through WordPress, Laravel and Angular from an external team

f) RISL Cloudera: Involves Big data, Hadoop, Public APIs, Web application development through Python for **Rajasthan Government**

g) NOKIA PGT and BP softwares: Involves php codeignitor, Linux, MySQL, Power Bi, Azure, Gitlab CI/CD, Kubernetes, Docker.

h) Evergreen AI Conversational Chatbot:

1. **Custom Conversational AI/ML Chatbot:**
   - Built an AI/ML-based chatbot using advanced machine learning and natural language processing (NLP).
   - The chatbot facilitated intelligent, human-like conversations, assisting users with website navigation, questions, and tasks.
   - The system improved over time through continuous learning from user interactions.
2. **Python and Django:**
   - Python and Django served as the core backend, managing APIs, user sessions, and database operations.
   - Django provided a secure, scalable, and flexible foundation for the web application.
3. **AI Modeling:**
   - Custom AI models handled NLP tasks like intent recognition and entity extraction.
   - These models allowed the chatbot to understand complex queries and respond appropriately.
4. **GCP APIs:**
   - Google Cloud Platform (GCP) APIs, such as Dialogflow and Cloud Functions, enhanced chatbot functionality.
   - GCP enabled real-time data processing, insights retrieval, and effortless scaling.
5. **AWS Integration:**
   - AWS services like S3, Lambda, EC2, and RDS supported storage, machine learning deployment, and infrastructure management.
   - AWS provided scalability, redundancy, and ensured high availability across regions.
6. **Kubernetes and Docker:**
   - The chatbot was containerized using Docker, ensuring consistent environments across development and production.
   - Kubernetes managed container orchestration, handling traffic scaling, and ensuring continuous uptime.

Customization and Integration:

1. **Technology Agnostic:**
   - The chatbot was adaptable to various technologies and could integrate with front-end frameworks like React, Angular, or back-end systems like Python and Java.
2. **Customizable Features:**
   - Designed for high customization, allowing the chatbot to fit various use cases, industries, and user needs.
3. **Seamless API Integration:**

- Integrated with external APIs, enabling real-time data retrieval, workflow triggers, and dynamic responses (e.g., CRM systems, databases).

Deployment and Scalability:

1. **Cloud Deployment on GCP and AWS:**
   - Deployed on GCP and AWS for infrastructure flexibility, high availability, and cost optimization.
   - Leveraged each platform's strengths, e.g., GCP for AI and AWS for storage.
2. **Kubernetes Orchestration:**
   - Managed microservices architecture, dynamically scaling resources based on traffic to ensure smooth performance during high demand.

Outcome:

The Evergreen AI chatbot delivered a highly intelligent, customizable conversational platform for **evergreenai.net**, leveraging advanced AI modeling, seamless integration across cloud services, and efficient container orchestration. This made it a flexible, scalable, and interactive solution for diverse user needs across multiple platforms and technologies.

i) BETSER AI, XTENDLABS & Retail Cliq Conversational Bots:

Developed a custom conversational AI/ML chatbot for BTSER, a Dubai-based medical company, using cutting-edge technologies.

Key Technologies:

1. Python & Django (Backend)
2. AI/ML Modeling (Natural Language Processing, Machine Learning)
3. GCP APIs (Cloud Services)
4. AWS (Cloud Infrastructure)
5. Kubernetes (Container Orchestration)
6. Docker (Containerization)
7. Linux Machines (Infrastructure)

Workflow:

1. AI Model Development
2. Backend Development
3. Cloud Integration
4. Containerization
5. Orchestration
6. Infrastructure Management

Outcome:
Delivered a highly customizable, scalable, and versatile chatbot solution for BTSER, ensuring:

- Accurate medical query handling
- Seamless integration with various technologies (WordPress, React, Next.js, Vue.js)
- High availability and efficient scaling
- Consistent performance across environments

This project showcases expertise in AI/ML, cloud computing, containerization, and DevOps, providing a robust and reliable conversational AI solution for the medical industry.