# **NISARG SHAH**

🤳 9303332954 🖾 nisargshahusa@gmail.com 🛅 nisarg001 🖓 nisarg0606 🦁 nisargshah.co 📣 nisarg001

### **EDUCATION**

### **Indiana University - Bloomington**

Master of Science in Computer Science

**Coursework:** Applied Algorithms, Elements of AI, Software Engineering - I, Engineering Cloud Computing, Advance Machine Learning

#### Kadi Sarva Vishwavidyalaya

Bachelors of Engineering in Computer Engineering GPA: 8.23/10 Coursework: Object Oriented Programming, Advanced Algorithms, Operating Systems, Database Systems, Web technologies

### **TECHNICAL SKILLS**

Languages: Java, Python, C, C++, Golang, Javascript Services: Distributed Databases, SQL, NoSQL, PostgreSQL, Oracle SQL Web Technologies: RESTful, JSON, HTTP, Gradle, Maven, REST Tools: Git, Jira, Confluence, Jenkins, Docker, Kubernetes, AWS Frameworks: Spring, Springboot, NodeJS, ExpressJS, Flask

#### EXPERIENCE

### **UITS - Indiana University**

Part-Time Accessibility Assistant

- Championed accessibility: Converted 100 legacy documents to accessible PDFs, impacting 1000 users with disabilities.
- Rigorous quality control: Achieved 98% success rate in meeting accessibility standards through 12 rigorous checks.
- Collaborative spirit: Successfully collaborated with 4 cross-functional teams to integrate accessibility, leading to 78% increase in accessible document production.

### Dhirubhai Ambani Institute of Technology (DAIICT)

Part-Time Research Intern

- Tweet Master: Scraped 1.5M tweets on inflation with API & Selenium, optimized retrieval in MongoDB (tailored schema).
- NLP Pro: Achieved 89% accuracy in inflation sentiment analysis using BERT embeddings, aligned with NLP research.
- Topic Guru: Extracted inflation topics with BERTopic, boosted accuracy by 97% through manual annotation & tuning.
- Collaborative Modeler: Analyzed 58,000 tweets for finetuning, offered insights on public expectations & sentiment.

### **Capri Technosys**

Jr. Software Developer (Backend)

- Scalable Data Acquisition: Leveraged Jsoup to scrape diverse data from 58,000 websites, ingesting a massive 325,000 units of information into efficient AWS S3 storage, fueling model training and analysis.
- Teamwork-Driven Impact: Partnered with the ML team, translating linguistic insights into actionable features. My data contributions, stored in AWS S3, helped the model's fraud detection accuracy soar by 70%.
- Linguistic Detective & Accuracy Booster: Analyzed extracted data, calculating unigrams, bigrams, and trigrams to uncover language patterns. These insights, integrated with the model via AWS S3, bolstered prediction accuracy by 93%.
- Agile & Automation Advocate: Utilized AWS CLI commands to effectively manage and transfer data stored in S3, ensuring seamless collaboration and agile workflows within the team.

### PROJECTS

Patient Tracker System | Microservice, Angular, SpringBoot, SQL, JWT, JSON, Load Testing

- Developed micro-service application for Patient Tracking System using Spring Boot and Angular.
- Used MFA for authentication and leveraged JWT for session management.
- Implemented PDF generation, data security, data visualization and email service.

### **Advance Project Management System** | *TypeScript, NodeJS, MongoDB, ExpressJS*

- Developed a feature-rich full-stack web application for university use, facilitating seamless communication and collaboration between Admins, Faculties, and Students in project endeavors.
- Revamped university workflows: Admins efficiently created 100+ student accounts, while Faculties expedited approvals and allocated students through an intuitive Kanban board interface, resulting in a 40% reduction in administrative time.

### AgriOracle - IBM Hack Challenge 2021 Winner | Python, IBM Watson Studio and Chat-bot

- Led the development of an AI-driven application, utilizing soil composition and weather data to achieve a 20% increase in crop yield and a 15% reduction in water usage for optimal crop selection.
- Implemented season-specific crop yield projections and price forecasts, achieving an 18% increase in accurate yield predictions and a 25% improvement in price forecasting accuracy over a 12-month horizon.

#### 01/2021 - 08/2022

#### Ahmedabad, Gujarat, India

Gandhinagar, Gujarat, India

### 09/2023 - 12/2023

01/2023 - 03/2023

06/2021 - 08/2021

## 07/2023 - 05/2024

GPA: 3.0/4



11/2022 - 06/2023

# 07/2019 - 05/2023

01/2024 - Present Bloomington, IN, USA