Ansuman Sasmal

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EDUCATION

Syracuse University, School of Engineering and Computer Science (Syracuse, NY, USA) *August 2021 – May 2023*
Master of Science in Computer Science

Kalinga Institute of Industrial Technology (Bhubaneswar, India) *June 2014 – May 2018*
Bachelor of Engineering in Computer Science & Engineering

TECHNICAL SKILLS

Programming tools: Python, Java, C#, HTML, JavaScript, Node.js, Angular.js, Typescript, Vue.js, R, Apache Hadoop, Kafka, Tomcat
Cloud Services: AWS (SageMaker, S3, EMR, Redshift, Lambda, EC2), Docker, Git, Jenkins, GitHub, Azure, GCP, Heroku
Databases and MQ: SQL (MySQL, Postgres), NoSQL (MongoDB, Redis), ActiveMQ, Oracle
Framework: Spring, Spring boot, Spring Core, Spring Security, ASP.NET MVC, FastAPI, Flask, Consul, JUnit, Mockito, JBoss
IDE and Tools: Eclipse, IntelliJ, SQL Trace, Dynatrace, Kibana

PROFESSIONAL EXPERIENCE

Research Assistant, SU – The C4 Lab (Syracuse, New York) *November 2022 – June 2023*

- Implemented data cleaning techniques and ETL processes, resulting in a 15% noise reduction in Twitter datasets for enhanced sentiment analysis accuracy.
- Developed a high-performing sentiment analysis model using Bert-Base-Uncased-Go-Emotion, achieving 96.14% accuracy on 100,000 labeled tweets. This outperformed traditional ML by 10%, effectively capturing nuanced sentiment nuances.
- Engineered an efficient Apache Kafka pipeline for real-time tweet ingestion and dynamic sentiment analysis. Achieved sub-500ms latency, facilitating rapid response to emerging trends. Collaborated within an agile lab environment, following Scrum methodology, to ensure effective teamwork and adaptability.

Software Engineer Intern, Our Ability, Inc (Albany, New York) *May 2022 – November 2022*

- Developed REST APIs with ASP.NET, automating form field population, reducing completion time by 80%. Designed an accessible UI following WCAG Level AA guidelines, elevating user engagement by 20% for differently-abled users.
- Incorporated a Named Entity Recognition (NER) model through Microsoft Bot Framework, swiftly identifying user intents, resulting in a 40% usage increase.
- Collaborated across teams, enhancing the chatbot's grasp of user interactions and refining the experience, particularly benefiting differently-abled users.

Software Engineer, Zycus Infotech PVT LTD (Bengaluru, India) *June 2018 – June 2021*

- Collaborated within an 8-member team to develop an invoice categorization system using in-house OCR technology, achieving an impressive 96% data extraction accuracy. Leveraged Spring Framework for enhanced scalability and architectural efficiency.
- Led the creation of a cross-product integration API, integrating Redis cache management. This resulted in a 40% reduction in system latency and significantly improved scalability for 20+ enterprise clients.
- Contributed to a 7-member team in building a fraud detection tool using the Random Forest algorithm, achieving an exceptional 95% prediction accuracy. This initiative led to a substantial reduction in fraudulent activities, enhancing overall system integrity.
- Utilized Spring Boot and microservices architecture to transform a monolithic application, yielding a noteworthy 52% performance improvement and optimized processing of critical supplier data. This approach allowed faster feature deployment and efficient resource allocation.
- Facilitated cross-team communication and interaction to gather user feedback and insights, leading to iterative system improvements based on real-world usage.

Academic Projects

Job Notification System: *May 2023 – June 2023*

- Developed a scalable distributed backend using Spring Boot for a Job Notification system. Implemented efficient REST API endpoints to retrieve job links from the company's career page, enhancing performance and responsiveness. Utilized MongoDB for optimized data retrieval.
- Implemented Tesseract OCR (Optical Character Recognition) to extract relevant data from resumes. Enabled skillset matching with job descriptions, generating personalized job recommendations based on applicant qualifications. Leveraged Spring and Apache Kafka for seamless job alerts and notifications.

Text Summarizer: *May 2023 – June 2023*

- Developed and deployed an end-to-end NLP project, including data processing, modeling, and prediction pipeline.
- Implemented CI/CD deployment of a text summarization tool using Google Pegasus-XSUM on Amazon EC2, leveraging GitHub Actions.

LUIS chatbot for job search: *May 2022 – August 2022*

- Integrated Azure Cognitive Services' Language Understanding (LUIS) into the chatbot for improved comprehension and extraction of job-related details from user queries.
- Incorporated job search APIs within the chatbot using ASP.NET, displaying relevant job postings based on user preferences, ensuring a seamless job search experience.