Bhavya Batta

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SKILLS

Languages: Java, JavaScript, Python, Scala, Typescript, SQL, CSS, HTML, Bash, C++
Technologies: Spring Boot, Kafka, React.js, Node.js, Express.js, Jenkins, AWS, Docker, Kubernetes, Flask, UNIX**,** Git, JIRA
Testing Frameworks: JUnit, Mockito, Selenium

TECHNICAL EXPERIENCE

University of Illinois | Graduate Assistant ***Aug 2023 – Present***

▪ Developed and tested applications using MongoDB, React.js, and Node.js to streamline workflows for the College, demonstrating strong problem-solving skills as a self-starter while improving platform efficiency and writing comprehensive test cases for quality assurance

Enphase Energy | Senior Software Developer ***Dec 2022 – Jul 2023***

▪ Architected a robust and scalable distributed system for real-time power load optimization ▪ Developed and maintained back-end REST APIs with Spring Boot, leveraging design patterns and SOLID principles to ensure maintainable, reliable, and extensible code throughout the software development life cycle ▪ Engineered a high-performance Notification Service with SQS-based async messaging, achieving a 60% reduction in latency, optimizing engagement and response handling ▪ Optimized the team's most used API (200 rps) by implementing caching and refining logic, reducing P95 latency from 800ms to 200ms ▪ Implemented secure authentication and authorization using JWT and OAuth protocols, enhancing user access control and data protection across applications ▪ Implemented the OpenADR protocols with mutual TLS authentication, securing server-to-server communication and enhancing system security and reliability

Cisco | Senior Software Developer ***May 2020 – Dec 2022***

▪ Architected a low-latency, high-performance cloud-native architecture to integrate paperless eSignature solutions into 25 applications across multiple business units ▪ Single handily enhanced code reusability by 40% and reduced data presentation latency by 15% through the implementation of microservices architecture, RESTful APIs, and event-driven design, improving scalability, reliability, and overall system performance ▪ Leveraged Kafka for event-driven design and synchronous communication, enhancing system reliability and ensuring effective messaging between microservices ▪ Implemented self-healing scripts with Resilience4j, boosting application resilience and robustness by 1.5x through retry logic and circuit breaker ▪ Spearheaded the integration of CI/CD pipelines, streamlining the deployment of new product features across front-end and back-end services while collaborating with DevOps teams to ensure faster release cycles ▪ Optimized ETL workflows by scripting additional validations, reducing human errors by 20% and improving data integrity ▪ Acted as a mentor to new graduate hires, providing guidance and support to enhance their technical skills and professional development

Cisco | Software Developer ***Jul 2019 – May 2020***

▪ Led the revamp of a revenue attribution web application using Spring Boot, significantly improving financial reporting accuracy and scalability through microservices architecture ▪ Developed a real-time alert automation web app using REST APIs and event-driven architecture, reducing incident response by 11.5% based on live sales data monitoring ▪ Collaborated with cross-functional teams to deliver high-quality, innovative solutions, leveraging strong communication skills and flexibility to ensure responsive, resilient systems that adapt to evolving business needs, driving impactful results across multiple applications ▪ Collaborate in a fast-paced environment to produce detailed documentation and specifications, enhancing team efficiency and project success

Cisco | Software Developer Intern ***Jan 2019 – Jul 2019***

▪ Developed a sales data dashboard using Flask, Angular, and MongoDB to visualize and analyze Cisco's sales metrics, improving data-driven decision-making and reporting efficiency▪ Leveraged Elasticsearch to analyze data, proactively reducing errors and improving decision-making accuracy through real-time search and analytics

PROJECTS

CHICAGO RENTALS [API Gateway, REST APIs, PostgreSQL, Resilience4j, Object-Relational Mapping, Zipkin, Design patterns, System Design] ▪ Engineered a real-time end-to-end full stack rental application with decentralized data management to increase the availability by 1.25x ▪ Utilized Webpack module federation to increase modularity and efficiency ▪ Architected microservices architecture and applied SOLID design principles for scalability and maintainability ▪ Deployed a Kafka messaging queue to facilitate reliable communication between services ▪ Incorporated MongoDB to enhance scalability by handling 50% more concurrent users ▪ Monitored application health and logs using Log4j and Zipkin to ensure smooth operations and quick debugging ▪ Integrated Stripe API for secure and flexible payment processing ▪ Conducted thorough testing using JUnit to ensure robustness and reliability

BBLLM [Scala, Hadoop, Big Data, MapReduce, AWS EMR, Spark, Distributed Systems]▪ Developed LLM from scratch, using massively parallel distributed computations in the cloud for data processing and vector embeddings ▪ Implemented cloud-based Map/Reduce architecture on AWS EMR, optimized neural network training with Spark, and deployed LLM-based generative systems using Amazon Bedrock and cloud-deployed lambda functions ▪ Utilized Scala and the ScalaTest framework to create efficient, testable, and scalable applications; adhered to functional programming principles ▪ Improved scalability and distributed processing, gaining expertise in cloud computing, parallelism, and deployment best practices

STOCK MARKET NEWS ANALYSIS [Text Pre-processing, Word2Vec, BagOfWords, TF-IDF, SGD-Classifier, Naive Bayes, XGBoost]▪ Applied text pre-processing techniques such as stemming, tokenization, and lemmatization to financial news articles for data cleaning and preparation ▪ Embedded text using Word2Vec, BagOfWords, and TF-IDF to create feature representations for analysis.▪ Implemented and evaluated traditional classification models, achieving an accuracy of 73.24% with SGD-Classifier, 74.06% with Naive Bayes, and 81.99% with XGBoost

EDUCATION

University of Illinois Chicago **Chicago, Illinois**
Masters of Science, Computer Science (MS) *Expected: May 2025*
Relevant Coursework: Engineering Distributed Objects For Cloud Computing, Artificial Intelligence (AI), Machine Learning (ML), Programming-

Vellore Institute of Technology **Vellore, TN**
Bachelor of Technology, Computer Science (BS) *May 2019*
Relevant Coursework: Data Structures and Algorithms, Operating System(OS), Database Management System (DBMS), Software Engineering, Computer Graphics, Compiler Design, Computational Geometry, Computer Networks, Operating systems, Big data, Natural Language Processing