Shiva Teja Beerelli

Arlington, VA | beerellishivateja@gmail.com | +1 571 473 8767 | linkedin.com/shivateja25/

EDUCATION

The George Washington University (GWU)   August 2023 – May 2025 (Expected)
Master's in Computer Science, *SEAS Dean's Scholarship Award*   Washington, DC
- **Coursework:** Data Structures & Algorithm Design, Cloud Computing, Database Management Systems, Software Engineering, Advanced Software Paradigms, Computer System Architecture, Big Data & Analytics, Data Mining, Machine Learning.

TECHNICAL SKILLS

Programming Languages: Java, C, Python, JavaScript, SQL, NoSQL, HTML, CSS.
Frameworks: React, RESTful APIs, Spring Framework, Spring Boot, Hibernate, Django.
Databases: MySQL, PostgreSQL, Oracle database, MongoDB.
Cloud Technologies: Amazon Web Services (EC2, IAM, S3, VPC, ECS, RDS, SSM, CloudWatch, Lambda).
Tools: Git, Postman, Jenkins, Maven, Docker, Kubernetes, JUnit, Hadoop, Apache Kafka, Linux, Visual Studio, Eclipse, IntelliJ.

WORK EXPERIENCE

Software Engineer | Burns Law Library, GWU, DC   September 2023 – Present
- Developed a web app using **Spring Boot, PostgreSQL** and **React**, automating lookups and cutting manual effort by **40%**.
- Enhanced **React-based** interactive **route navigation feature**, optimizing UI interactions and reducing confusion by **35%**.
- Strengthened database efficiency by **40%** and cut query response times by **50%** by implementing **partial and multicolumn indexing** in **MySQL**, optimizing data retrieval, reducing latency, and enhancing overall system performance.
- Orchestrated **CI/CD** pipelines on **AWS EC2** using **CodeBuild, CodePipeline, CodeDeploy** and **SSM**, within an **Agile DevOps environment**, ensuring secure deployments and scalability.
- Deployed a secure, scalable web application on **AWS Elastic Beanstalk** and **EC2** integrating a high performance database.
- Optimized fullstack performance with **lazy loading**, **Redis caching**, **CloudFront CDN**, reducing page load times by **40%**.
- Strengthened **API security** by enforcing **Role-Based Access Control (RBAC)** reducing unauthorized access risks by **50%**.
- Diagnosed **400+** tickets by troubleshooting system issues and configuring cloud services, ensuring smooth operations.

Software Engineer Intern | Mikhvision Digi Solutions LLP, India   January 2023 – July 2023
- Enhanced high-throughput **data pipelines**, boosting efficiency by **35%** and ensuring seamless **microservices** integration.
- Improved software quality with **JUnit** and **CI/CD automation**, reducing bugs by **40%** and accelerating releases by **30%**.
- Systemized microservices builds using **Jenkins** pipelines, pushing builds to **Docker** registry and deploying to **Kubernetes**.
- Collaborated with a cross-functional Scrum team to manage tasks throughout SDLC while adhering to Agile best practices.

Java Development Intern | CodeClause Pvt. Ltd., India   November 2022 – December 2022
- Architected **RESTful APIs** in Spring Boot and implemented microservices with **Spring Cloud**, reducing downtime by **40%**.
- Built a feature-rich front-end using **ReactJS**, integrating with backend to ensure a dynamic and efficient user experience.
- Streamlined efficiency by reducing **regression testing** time by **40%** through comprehensive **E2E** test cases using **JUnit**.

Full Stack Developer Intern | Jagruti Technosys Pvt. Ltd., India   January 2022 – October 2022
- Assembled high-availability RESTful APIs using Spring Boot, enhancing data processing and improving system efficiency.
- Increased access control efficiency by **50%** by implementing **OAuth 2.0** and **JWT** authentication in **Spring Security**.
- Accelerated database queries by **45%** with **Redis caching** in **Spring Data Redis**, enhancing back-end speed by **35%**.
- Refined **load balancing** by **30%** and boosted scalability by integrating **API discovery** through **Spring Eureka**.
- Reduced job execution time by **50%** by automating large-scale data processing using **Spring Batch** and **Apache Kafka**.

PROJECTS

Event Reservation System   February 2024 - June 2024
- Engineered an event reservation system using Spring Boot, PostgreSQL, and React, allowing users to submit event details, securely store them in a relational database, and streamline scheduling, minimizing manual coordination efforts.
- Integrated **Spring Mail API** to automate admin notifications, enhancing event coordination and responsiveness.

Fraud Prediction System   January 2024 - April 2024
- Conceptualized a fraud detection system for loan applications using **Big Data Analytics** and **Machine Learning**, deploying a scalable **Hadoop** cluster on **Google Dataproc** with **HDFS** and utilizing parallel processing for efficient model training.
- Implemented data processing and feature engineering with **PySpark**, achieving **99.25%** accuracy and F1-score of **95.23%**.

CERTIFICATIONS & LEADERSHIP ACTIVITIES

Certifications: AWS Cloud Foundations (AWS) | Core Java (Internshala) | Java Spring with Spring Boot (Udemy) | Web Development (Coursera) | Python Programming (Coursera) | Operating Systems (Google Coursera).
Leadership Activities: Cultural Club Head, BVRIT | Coding Brigade BVRIT Club | Hostel Student Representative, BVRIT.