Bharat Chundru

Software Engineer
+1 (217) 953 5539|Alpharetta, GA
Gmail:chundrubharat6699@gmail.com
LinkedIn: https://www.linkedin.com/in/bharat-chundru

SUMMARY

Software Engineer with over 2+ years of professional experience in designing and developing scalable, high-performance web applications, APIs, and microservices. Proficient in Java, Python, Spring Boot, React, expertise in leveraging design patterns, clean code practices, and CI/CD pipelines to deliver high-quality solutions.

WORK EXPERIENCE

Illinois Department of Innovation & Technology (DoIT) — **Springfield, IL**
Software Engineer — **Mar 2024 – Present**

- Developed responsive user interfaces using **HTML5**, **CSS3**, and **Bootstrap Grid System**, leveraging **Flexbox** and **media queries** to ensure cross-device compatibility and enhanced accessibility.
- Implemented reusable **React components** and optimizing state management using **Redux Toolkit**, including a**ctions, reducers, thunks**, and **selectors** to efficiently manage and streamline application state
- Built a **high-concurrency payment processing system** using **Spring Boot Async Programming** with **@Async** and **CompletableFuture**, improving throughput by 40%. Utilized **ThreadPoolTaskExecutor** to optimize thread management and avoid bottlenecks during bulk API calls.
- Solved **slow database queries** in a multi-tenant application by implementing **Spring Data JPA Specifications** with dynamic query filters and **@EntityGraph** for lazy loading, reducing query time by 60%.
- Implemented scalable **RESTAPI and GraphQL APIs** using **Spring Boot and Java**, enabling efficient data retrieval and manipulation. Integrated backend services with dynamic query resolvers and mutation handlers for modularized and optimized data flow.
- Leveraged **Docker** to containerize applications, ensuring consistent deployments across environments, and utilized **AWS Lambda** for serverless execution, **DynamoDB** for real-time data handling, and **Amazon S3** for efficient asset storage management.

BSNL India — **Hyderabad, India**
Software Engineer — **Dec 2021 - Aug 2022**

- Designed and maintained dynamic web applications using **React, JavaScript, HTML5, and SCSS**, leveraging **React Query** for real-time updates and optimizing backend logic with **Spring Boot, REST APIs,** and **JDBC**, achieving a 30% performance boost in request handling
- Built with modular features such as **JWT-based authentication**, **OAuth2 login integration**, and **role-based access control (RBAC)** using **RESTful APIs**. Enhanced search functionalities with **Elasticsearch** and **filter-based indexing**, reducing search latency by 40%.
- Developed an **automated testing framework** using **JUnit** for backend unit testing and integrated **Maven build profiles** for environment-specific configurations, ensuring efficient builds and consistent test coverage.

APSSDC — **Vijayawada, India**
Web Developer Intern — **March 2021 - June 2021**

- Designed and maintained **Dashboards** using **HTML5**, **CSS3**, and **JavaScript**, improving **UI/UX** performance, Optimized backend development using **Node.js and Express**, and Implemented **SQL** queries for database management and optimization.
- Collaborated with designers and backend developers to integrate **RESTful APIs** and enhance functionality.
- Utilized **Git and GitHub** for version control and collaborated using Agile methodologies.

PROJECTS

Portfolio website

- Developed a **responsive portfolio website** using **HTML5**, **CSS3**, **JavaScript**, and **ReactJS**, integrating a **contact form** with **email functionality** via **EmailJS**, enhancing user engagement.
- Designed and implemented **custom React Hooks** for modular and reusable logic, managing **form validation**, **state management**, and **API integration**, improving development efficiency.

E-commerce platform

- Developed a **full-stack E-commerce platform** using **React** for a dynamic and responsive UI, **Node.js** for scalable server-side processing, and **MongoDB** for NoSQL database management.
- Implemented key features such as **JWT-based user authentication**, **product catalog with pagination**, **shopping cart with Redux state management**, and **real-time order tracking**.

Heart Disease Prediction

- Designed and implemented a **heart disease prediction system** using **Logistic Regression** and **Random Forest**, leveraging **scikit-learn** for efficient algorithm deployment.
- Preprocessed raw medical datasets with techniques like **scaling, one-hot encoding**, and **PCA** to reduce dimensionality, and engineered key features such as **cholesterol levels**, **blood pressure**, and **BMI** to enhance predictive accuracy.
- Achieved a **94% model accuracy** through advanced **hyperparameter tuning** using **GridSearchCV** and **cross-validation**, ensuring model robustness and reliability across test datasets.

EDUCATION

University of Illinois Springfield Springfield, IL
Master of Science, Computer Science **Aug 2022 - Jan 2024**
GPA: 3.84

Technical Skills

- **Programming Languages**: Java (JDK 8+, Multithreading, CompletableFuture), JavaScript/TypeScript, (ES6+, Async/Await) Python, SQL, Bash
- **Databases**: MongoDB, MySQL, Oracle DB , PostgreSQL
- **Frontend**: HTML5, CSS3, Bootstrap, JavaScript Material-UI, ReactJS (React router, Redux Toolkit, React Context API, Custom Hooks, Lazy Loading with Suspense)
- **Backend**: Spring Boot, Node.js, Hibernate
- **API**: REST API((Pagination, HATEOAS), GraphQL (Resolvers, Queries, Mutations)
- **Version Control**: Git, GitHub, GitLab, Bitbucket
- **Machine Learning**: scikit-learn, TensorFlow, Random Forest, Logistic Regression
- **Data Engineering**: Feature engineering, data preprocessing, and deploying ML models
- **CI/CD**: Jenkins, GitHub Actions, Nexus Repository, Docker
- **Testing Frameworks**: JUnit 5, Mockito, Jest, Postman, LoadRunner
- **Cloud**: AWS(EC2, S3, Lambda, DynamoDB), GCP:(Compute Engine, Cloud Pub/Sub, BigQuery)
- **Development Practices**: Agile (Scrum, Kanban), Test-Driven Development, Behavior-Driven Development

Licenses & Certifications

Walmart: Advanced Software Engineering	Credentials ID: RYBbQhkgZv84qFFFf
Accenture - Coding: Development & Advanced Engineering	Credentials ID: YcYhvTixKPSskxwkX
Wells Frago - Software Engineering	Credentials ID:dK86L4YtGMMpZ3Txn