**SHARVIKA NITIN KULKARNI**

**SOFTWARE ENGINEER**

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**SUMMARY**

* Experienced Software Engineer having around **3+ years**, with a robust background in **Java**, **Python**, **C++** and **full-stack development**. Proven track record in developing scalable, high-performance applications and delivering comprehensive solutions across various industries.
* Experienced in managing relational and non-relational databases such as MySQL, PostgreSQL, PL/SQL, and MongoDB, ensuring data integrity and efficiency.
* Proficient in **AWS** services including IAM, S3, EC2, RDS, Lambda and RedShift capable of designing and maintaining scalable cloud infrastructure.
* Well-versed **in front-end** including HTML, CSS, JavaScript, jQuery, AJAX, JSON, Bootstrap, and Restful API, alongside modern libraries and frameworks such as Redux, TypeScript, Angular, and React.js.
* Deep expertise with **backend development** in using Spring Boot, Hibernate, Express.js, Node.js Spring Beans, Spring Security, Spring JPA, Django REST and Flask along with building Microservices architectures.
* Proficient in utilizing **Git** for version control, adept with testing tools such as Selenium, JUnit, and Postman, and experienced in applying Agile and Waterfall methodologies within **SDLC** to enhance software reliability, performance, and timely project delivery.
* Knowledgeable in Docker, Kubernetes, and Jenkins for effective CI/CD pipelines, containerization, and automated deployment processes.

**TECHNICAL SKILLS**

**Programming Languages:** Java, Python, SQL, C++.

**Databases:** MySQL, PostgreSQL, PL/SQL, MongoDB.

**Cloud Technologies:** AWS (IAM, S3, EC2, RDS, Lambda, RedShift).

**Web Technologies:** HTML, CSS, JavaScript, jQuery, XML, AJAX, JSON, Bootstrap, Restful API, Redux, TypeScript**.**

**Frameworks:** Spring Boot, Angular, React.js, Hibernate, Express.js, Node.js, Spring Beans, Spring Security,

Spring JPA, Microservices, Flask, Django, Graphql.

**Version Control Tools:** Git, GitHub, Gitlab.

**Tools:** Selenium, Junit, Postman, SOAPUI, Mockito, Apache Tomcat, Putty, Docker, Kubernetes, Jenkins

**Methodologies:** SDLC, Agile, Waterfall.

**IDES:** NetBeans, IntelliJ IDEA, Eclipse, VS code, GitHub Codesapces

**Other Skills:** Problem solving, Systems Design, Distributed Systems, Cloud Computing

**EDUCATION**

**California State University Long Beach CA, USA**

**Masters of Science in Computer Science | GPA: 3.7/4.0 Aug 2022 – May 2024**

**Coursework:** Advanced Data Structures & Algorithms, Advanced Artificial Intelligence, Advanced Computer Architecture, Distributed Computing

**University of Pune Pune, India**

**Bachelor of Engineering in Computer Engineering | GPA: 7.99/10.0 Aug 2015 – May 2019**

**Coursework:** Database Management System, Web Technology, Object Oriented Programming, Machine Learning, Operating System, Computer Networks

**PROFESSIONAL EXPERIENCE**

**Opportunity Hack Remote, USA**

**Virtual Software Engineer**  **Jul 2024 – Present**

* Currently integrating a seamless donation system for the Opportunity Hack Developer Portal using Python/Flask and Node.js, ensuring secure, **in-website payment processing** without redirection to third-party website.
* Set up and configured sandbox accounts for payment providers (PayPal, Stripe), creating backend endpoints in Flask for donations, and developed a frontend flow to handle payments efficiently, enhancing user experience and increasing potential donations.

**Institutional Research & Analytics Long Beach, CA**

**Software Engineer**  **Jan 2023 – Jul 2023**

* Redeveloped and optimized a Django REST API for a student financial aid reporting tool, enhancing **data management** for over **2,000** students and improving report generation performance by **20%.**
* Led the migration of this Django application to AWS, leveraging Amazon RDS and AWS Lambda for scalable, serverless operations that reduced operational costs.
* Streamlined **financial aid data** management and reporting for College of Engineering students by engineering scalable SQL and PL/SQL procedures, reducing report generation times by **30%.**

**Tata Consultancy Services India**

**Systems Engineer (Developer) Apr 2021 – Jun 2022**

* Worked within an agile team to overhaul an **e-commerce** web application using Java, Spring MVC, enhancing core functionalities and improving system response times by **30%**, supporting **10,000 daily transactions.**
* Designed and executed complex SQL and PL/SQL queries on MongoDB and relational databases, optimizing data retrieval and manipulation for business-critical applications.
* Restructured and managed **30+ microservices** using Spring Boot and Hibernate ORM, redesigning JSON and XML objects with SQL Server, resulting in a **25%** increase in data retrieval speed and a **50%** increase in user capacity.
* Built responsive and interactive user interfaces using React.js and Bootstrap, ensuring high performance and seamless cross-platform compatibility.
* Managed source code and version control using GitHub, facilitating team collaboration and maintaining a reliable codebase for multi-developer projects.
* Implemented **unit testing** with JUnit and API testing with Postman and SOAPUI to ensure the robustness and reliability of application components before deployment.
* Adhered to **SDLC principles** to streamline the development process from requirement gathering to deployment, shortening project delivery times and improving stakeholder satisfaction.

**Amdocs Development Center India India**

**Software Engineer Jun 2019 – Dec 2021**

* Designed complex server-side logic for **telecom domain** application (US Cellular) using Java and Spring Boot, Spring JPA integrating Spring Security to fortify authentication and authorization, ensuring secure, multi-platform operations.
* Utilized **Unix commands** and **PuTTY SSH** to run shell scripts that extracted billing data, cross-referenced with frontend displays, and debugged discrepancies, reducing billing errors by **20%** and improving customer satisfaction.
* Engineered robust database architectures and performed advanced SQL manipulations with MySQL stored procedures optimizing data storage, retrieval, and integrity, which improved system efficiency by **30%** for business-critical systems.
* Deployed and managed scalable application using AWS technologies, including **configuring IAM** for secure access management, utilizing **S3** for storage, deploying services on **EC2,** managing databases with **RDS,** and automating processes with **Lambda** functions.
* Constructed responsive and visually appealing front-end interfaces using React and leveraged Redux for state management, enhancing user experience and significantly increasing user engagement metrics across large-scale applications.
* Collaborated in **SCRUM** environments for **EPC releases**, crafting test scenarios, enhancing teamwork with HP Quality Center and Jenkins, and executing comprehensive testing strategies using Selenium and Postman to ensure all components met strict quality standards across diverse environments.

**Espire India**

**Frontend Developer Intern Jul 2018 – Dec 2018**

* Developed user-friendly interfaces using HTML, CSS, and JavaScript for inventory management systems, ensuring compatibility and responsiveness across devices.
* Enhanced application performance and user experience by leveraging **jQuery for DOM** manipulation and **AJAX** for **asynchronous data exchanges**.
* Integrated JSON and XML for efficient data interchange, reducing retrieval times and backend errors, and utilized Bootstrap for rapid, responsive development.
* Built dynamic **single-page applications** with Angular, improving scalability and reducing maintenance costs.
* Managed application state and performed **CRUD** operations with MySQL, PostgreSQL ensuring seamless data management and integrity.
* Used Git for version control, managing branches and merges to maintain code quality and track revisions effectively, while enabling collaboration across the development team.

**FinIQ Consulting India Pvt Ltd India**

**Full Stack Developer Intern May 2018 – Jun 2018**

* Spearheaded the enhancement of functionalities in a **MERN** stack-based **payroll application**, implementing **clean code practices** and scalable solutions for HR operations and streamlined payroll processes, impacting over **200 employees** and reducing payroll processing time by 30%.

**PROJECTS**

**Bug hound Testcase Tracker |** React, Django REST framework, MySQL, Python, JavaScript, Tailwind CSS, Docker

* Designed and implemented test case management application to streamline bug tracking and improve software testing efficiency, resulting in a 40% reduction in issue resolution time, encapsulated within Docker for consistent deployment and maintained via GitHub for version control.

**Instagram Clone Application |** Java, Spring Boot, React, RESTAPI, Apache Tomcat, Unit Test   
• A full stack java Instagram clone application created to provide a seamless social media experience, featuring secure user authentication and real-time story sharing, post updates and enhancing user engagement and security.

**Web Chat Open AI 4.29 |** React Chat Engine, Node.js, Express.js, Redux Toolkit, OpenAI SDK

* Integrating Chat Engine with the advanced AI capabilities of OpenAI's GPT-3.5 model, designed to deliver a unique chatting experience, this application facilitates intelligent, AI-powered conversations alongside traditional messaging functionalities.

**ACHIEVEMENTS AND LEADERSHIP**

* Developed and published an [IEEE Publication](https://ieeexplore.ieee.org/document/9432075/authors#authors) on automated **Diabetic Retinopathy classification tool** using a Deep Convolutional Neural Network on Google Cloud, achieving 81% accuracy on 35,126 retinal images.
* Serving as a **Backend Developer Mentor** for **TeamUp**, a non-profit organization, guiding college students in developing mobile and web applications, and documenting best coding practices.