Prakhar Srivastava

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Motivated and results-driven Senior Software Engineer with experience building large-scale, high-performance systems across healthcare, cloud, and enterprise domains. Proficient in C++, Java, Python, and Unix shell scripting, with a strong background in backend services, REST APIs, and microservices migration. Skilled in cloud platforms (Oracle, AWS, Azure), databases, and data-driven solutions. Strong in databases, ML, and LLMs. Skilled in shell scripting and healthcare systems. Excels in cross-functional team collaboration.

Experience

Oracle   Seattle, USA
Senior Software Engineer   *Mar 2025 – Present*

- Work with team members to manage and automate Server Deployment, upgrades, code reviews, and version release management.
- Designed and optimized enterprise print management software handling **1M+** daily healthcare transactions, reducing processing time by **25%** and improving reliability in large-scale hospital environments.
- Resolved critical defects and drove migration initiatives from legacy Gen1 to Gen2 print stack, ensuring 99.9% uptime and seamless integration with automated testing frameworks across hundreds of healthcare clients.
- Developed performance-critical **C++** modules to enhance backend services, improving throughput and stability in healthcare data workflows.
- Developing **Unix shell** scripts to automate print workflows and manage job queues for **Oracle Health infrastructure**.
- Authored and maintained advanced shell scripting utilities to automate deployments, monitoring, and diagnostics, significantly reducing manual effort and downtime during production incidents.
- Built and maintained backend services with **Java, Spring Boot, and Python**, leveraging **Oracle Cloud Storage** for data analysis and debugging, improving data accessibility and system reliability
- Created interactive web pages using **Java, HTML5, CSS3, JavaScript, JSON** and **Bootstrap** for client-side validation.

ABB Ltd.   Bengaluru, India
Software Engineer   *Feb 2024 – Feb 2025*

- Developed AI-driven text generation using **LLMs** with scalable backend services in **Java** and **Spring Boot**, integrating **RESTful APIs** and **Azure Cognitive Services** for secure document processing, while merging a **JavaScript** and **ReactJS** frontend.
- Developed **REST API** endpoints to optimize the account verifications and integration tests using **Cypress, Python** and **JAVA**.
- Built scalable Batch Processor for cloud file migration using **JAVA, Azure, and Kubernetes** with **ActiveMQ** communication.
- Designed document SyncOverseas application with **JAVA, Spring Boot** and **MongoDB** for cloud-edge data synchronization.
- Deployed Azure data pipeline for GenAI-driven content generation, saving **40%** time using **JAVA, TypeScript, Python, SQL**.

Amazon LLC   Seattle, USA
Software Developer Engineer   *July 2022 – Dec 2023*

- Experience building large-scale high-speed server-side software and working in a fast-paced, **CI/CD** and **Agile** environment.
- Developed **REST** based microservice and user interface web applications using **JavaScript, JSON, AngularJS,** and **XML**.
- Identified and resolved a bottleneck in the **AWS** software testing process, which saved **15%** time spent on software testing.
- Attention to quality and performance with a focus on building low-latency responsive apps using **Java, ReactJS, Typescript.**
- Migrate existing Monolithic architecture to full-fledged Microservices using **Spring Boot and Spring Cloud** in multiple stages

Monteage Technologies Pvt Ltd.   Delhi, India
Software Engineer   *Jan 2018 – Dec 2020*

- Automated website updates with **Python** and improved responsiveness using **Selenium, BeautifulSoup, Pandas** and **NumPy**.
- Developed various **JAVA 2 enterprise edition** applications within **microservices** architecture and effectively integrated them with **RESTful APIs** using **Kafka**
- Developed scalable **Spring Boot** microservices with **RESTful API** integration and **Kafka** for inter-service communication.
- Focused on providing clients with customized solutions for their real-time needs in the technology sector of Bar-codes, LED, RFID and GPS sensors, Smart Education Systems, firmware development, controllers, and IoT device solutions.

Hind Rectifiers Ltd.   Dehradun, India
Electrical Engineer   *July 2017 – Jan 2018*

- Executed verification by developing programs and modeling systems in **MATLAB, Python** and **JAVA** to evaluate and improve the real-time stability, reliability, and integrity of the system.
- Developed programs in **MATLAB, Python** and **Java** for system modeling and verification to enhance real-time stability.

Skills

Languages: Python, Java, C/C++, C#, Bash, KornShell (ksh), POSIX Shell, HTML, CSS, JavaScript, TypeScript, PHP, Kotlin, SQL, GraphQL, MATLAB

Frameworks: Spring Boot, Spring Cloud, Hibernate, React.js, Angular, Node.js, Express.js, Bootstrap, jQuery, .NET, Flask, REST APIs, Kafka, Docker, Kubernetes, Cypress, Selenium, JUnit, PyTest

Databases: AWS (DynamoDB, S3, RDS, Aurora), Azure (Blob Storage, Cosmos DB, SQL Database), Oracle (Oracle Cloud Storage, Oracle Database), MongoDB, MySQL, PostgreSQL

Cloud Platforms: AWS (EC2, Lambda, IAM, SNS, SQS, CloudWatch), Azure (OpenAI, Active Directory, Cognitive Services, App Services, Kubernetes Service), Oracle Cloud Infrastructure (OCI, Oracle Cloud Storage, Autonomous Database)

ML/AI Libraries: Pandas, NumPy, Matplotlib, Scikit-learn, TensorFlow, Keras, PyTorch, OpenCV, NLTK, Hugging Face Transformers, Selenium, BeautifulSoup

Tools & OS: CI/CD (Jenkins, GitHub Actions), DevOps, Agile/Scrum, Git, Docker, Kubernetes, Terraform, IntelliJ, VS Code, Jupyter, Google Colab, Linux, Windows, macOS

Transferable: Cloud Architecture (Oracle Cloud, AWS, Azure), Distributed Systems, Performance Optimization, Security & Compliance (HIPAA, Data Privacy), Research & Problem Solving, Teamwork & Collaboration

Projects

Comp-GAN Recommender System − *Python, TensorFlow*   *Jun 2021 - Aug 2021*

- Developed a generative model using GAN and adversarial minimax game for a recommendation system in **Python**

Automate Board Game − *Python, Matplotlib, JAVA*   *Feb 2021 - May 2021*

- Developed a board game in **JAVA** and **DistAlgo** with distributed processes as players and the board as an object.

Pandemic Trajectory − *Python, Openpyxl, Xlsxwriter, Json*   *Jun 2020 - Aug 2020*

- Built a script that utilizes **JSON** file to extract COVID-19 data and generate reports with graphs and trajectories.

Internet Of Things Controller − *Arduino IDE, C++, JAVA*   Google Scholar   *Jan 2017 - May 2017*

- Constructed an IoT prototype for switching power between wind and solar energy using **JAVA** and **C++**.

Education

Stony Brook University   Stony Brook, NY
Master of Science, Computer Engineering - 3.57 GPA   *Jan 2021 - May 2022*

DIT University   Dehradun, India
Bachelor of Technology, Electrical Engineering   *July 2013 – May 2017*