RAHUL SANJAY PANCHAL

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SUMMARY

Innovative **Software Developer** with hands-on experience in **full-stack development, AI-driven systems, and scalable database design**. Proven track record in building high-performance applications, optimizing system efficiency, and enhancing user experience. Skilled in **Java Spring Boot, React, Python, and cloud technologies**, with expertise in designing **RESTful APIs, real-time data processing, and AI-based recommendations**. Excited by **solving tough engineering problems**, **refining large-scale systems**, and **pushing the boundaries of innovation.**

WORK EXPERIENCE

Software Developer Intern, *InternOptima*, **(TEXAS, USA)**   *Aug '24 - Dec'24*
- Led the development of an **Automatic Playlist Creation System** that generated personalized playlists based on **user location, job role, and graduation date.**
- Collaborated **Frontend using React** and **Backend using Java Spring Boot**, optimizing API performance and CRUD operations for seamless **client-server communication.**
- Engineered a **scalable database architecture** that improved query speed by **40%**, ensured **99.9% uptime** for **10,000+ users**, and powered a **real-time recommendation system** that increased internship match accuracy by **25%** within **2 months**.

Web Developer Intern, *Let's Grow More*, **(MUMBAI, INDIA)**   *Oct '21 - Nov '21*
- **Boosted Zippy's performance** by **reducing load times by 25%** and refining responsiveness for a **fluid and intuitive interface**.
- **Increased server efficiency** by **30%**, reducing memory usage and boosting data processing speed for better overall performance.
- Designed and maintained **APIs handling 5,000+ daily requests** with **99.0% uptime**, ensuring seamless real-time data transfer and system reliability.

Full Stack Developer Intern, *The Spark Foundation*, **(MUMBAI, INDIA)**   *Sept '21 - Oct '21*
- Implemented a **real-time payment system** using the **Razorpay API**, processing **5,000+ transactions** with **100% success rate** in **a month.**
- Developed a **responsive** front-end with **React, HTML, and Tailwind CSS,** improving the **user experience by 35%**.
- Built a **microservice backend** using **Python and Flask,** handling **10,000+ transactions** with **99.9% uptime.**

TECHNICAL SKILLS

Object-Oriented Programing and Database Structures	**Language**: HTML, CSS, REACT, C, C++, PYTHON, PHP, JS, ANGULARJS, JAVA, KOTLIN
Database: MySQL, FIREBASE, MONGODB, SQL, RDBMS	**Runtime Environment**: NODEJS, JVM, PVM
Operating System: WINDOW, LINUX/UNIX, MAC OS	**Distributed Version Control System:** GIT
Cloud Platforms: AWS, GCP, AZURE	**Data Modeling:** CREATING DATA SCHEMA AND MODEL FOR ANALYTIC
Big Data Technologies: APACHE KAFKA, HADOOP, APACHE SPARK	**DevOps Tools:** Docker, Kubernetes

PROJECTS

JOBNEST: FULL-STACK JOB PORTAL (demo | video): PYTHON, FLASK, REACT, TAILWIND CSS, DOCKER, GOOGLE CLOUD
- Built a scalable job portal **Web Scraping 30-40 jobs** and **fetching 200–300** real-time listings from **The Muse API** in under **10 seconds.**
- Implemented **advanced search and filtering**; deployed via **Docker** and hosted on **Google Cloud** for seamless scalability.

AURA: ARTIFICIAL UNDERSTANDING & RESPONSE ASSISTANT (demo | video): REACT, TAILWIND CSS, JAVASCRIPT, NETLIFY
- Planned and Solved in **2 days**, integrated **Gemini 1.5 API** for **real-time, context-aware responses under 10s.**
- Enabled **markdown chat history, responsive UI,** and **handled 100+ interactions/sessions.** Hosted the website on **Netlify.**

STOCKWIZ: STOCK ANALYSIS APP (video): KOTLINE, FIREBASE, PYTHON, SCIKIT-LEARN, FIGMA.
- Superheaded a stock analysis app using **Tingo and Polygon APIs** with **1.5s query speed**.
- Achieved **85% accuracy** in **predictive modeling** and **3s/article sentiment analysis.**

TASK MANAGEMENT SYSTEM (demo | video): REACT, MONGODB, TAILWIND CSS, PYTHON, DJANGO
- Proposed a task manager with **CRUD, drag-and-drop, and overdue alerts;** processed actions in **<200ms.**
- Achieved **75% task completion in 2 months** and visualized progress for **100+ tasks via radial charts.**

CERTIFICATES

- Single Page Web Application with AngularJS from JOHNS HOPKINS UNIVERSITY (**Certificate**)
- Introduction to HTML5 from UNIVERSITY OF MICHIGAN (**Certificate**)
- Front-End Web UI Frameworks and Tools: BOOTSTRAP 4 from THE HONGKONG UNIVERSITY OF SCIENCE & TECHNOLOGY (**Certificate**)

PAPER PUBLICATION

- Bridging Theory and Implementation: DSA with Python (**Paper** | **Certificate**)
- Revolutionizing Code: The Role of AI in Software Engineering (**Paper** | **Certificate**)

EDUCATION

Master of Science in Computer Science   *Aug '23 - May '25*
University of Texas, Arlington   *GPA: 3.73/4.0*
Course Work: Data Structure and Algorithm, Web Data Management, Advance Software Development, Cloud Computing and Big Data

Bachelor in Information Technology   *Aug '20 - May '23*
University of Mumbai, India (Shah and Anchor Kutchhi Engineering College*)*   *GPA: 8.96/10*