Sai Koushik Puppala

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EDUCATION

National Institute of Technology, Patna Patna, India
Bachelor of Technology in Electronics and Communication Engineering; CGPA: 9.4 *Aug 2023 – Jun 2027*
Sri Chaitanya Junior College India
Intermediate (Maths, Physics, Chemistry); JEE Rank: 4235; Percentile: 99.67 *Jun 2021 – May 2023*

TECHNICAL SKILLS

Languages & Databases: Python, Java, C++, GoLang, MySQL, PostgreSQL, MongoDB
Web Technologies / Backend: JavaScript, HTML, CSS, jQuery, React.js, Typescript, Node.js, REST API
Developer Tools: Git, GitHub, Jenkins, CI/CD Pipelines, VS Code, Claude Code, Cursor
Frameworks & Libraries: Bootstrap, Flask, Spring Boot, Kotlin, Flutter
Cloud Technologies & Devops: AWS (ECS, S3, SQS, EMR), GCP, Big Query, Kubernetes, Docker
Machine Learning & Data Analysis: TensorFlow, PyTorch, Pandas, NumPy, Regression

PROJECTS

Match Making Application | *React, TypeScript, TailwindCSS, Python, Django, MySQL, JWT, WebSockets, AWS EC2, Git*
- Built a scalable **full-stack** matchmaking platform enabling users to discover and connect with others based on shared interests, location, preferences, and unique usernames.
- Developed a responsive, component-driven frontend using **React + TypeScript**, with state management using **Redux**.
- Integrated RESTful APIs for authentication, profiles, polls, forums, and chat features using Django REST Framework.
- Enabled real-time messaging and notifications using **WebSockets** (socket.io) including both individual and group chats.
- Designed reusable UI components and modern styling with **TailwindCSS**, ensuring cross-device compatibility.
- Deployed the system on **AWS EC2** with **Nginx**, achieving high availability and scalability for concurrent users as well.
- Utilized **Git, GitHub, and CI/CD workflows** for collaborative development and automated deployment pipelines.

YouTube Clone | *React, Redux, SCSS/SASS, AJAX, YouTube Data API, Firebase, Vercel*
- Built a scalable **YouTube Clone** with core features including video playback, search functionality and responsive design.
- Integrated the **YouTube Data API v3** for fetching video metadata, search results, and channel details in real-time.
- Enhanced UI with **SCSS/SASS modules**, achieving modular styling and 20% faster page performance through **AJAX-based data fetching**.
- Implemented authentication and user preferences (dark mode, subscriptions) using **Firebase Auth + Firestore**.
- Deployed the application on **Vercel**.

SplitPay – Expense Sharing App | *React, Java, Spring Boot, MongoDB, REST APIs, Bootstrap*
- Built a web application where friends or groups can **split bills and track shared expenses** in real time.
- Implemented user authentication and session management using **JWT**, ensuring secure access to expense data.
- Engineered scalable and secure RESTful APIs using **Java (Spring Boot)** for managing users, groups, and transactions, with efficient data persistence in **MongoDB**.
- Created a responsive and clean UI with **React + Bootstrap**, enabling easy expense entry and balance calculation.
- Integrated mock **PayPal Sandbox API** for simulating payments between group members.
- Deployed on **Heroku**, ensuring accessibility and scalability for multiple users.

CERTIFICATIONS

- Python for Everybody – Coursera
- Web Development Bootcamp – Udemy

SOFT SKILLS

- Problem Solving, Decision Making, and Creativity
- Time Management and Adaptable
- Collaboration and Teamwork

EXTRA CURRICULAR

- Active Member, **Coding Club @ NIT Patna**: Participated in coding challenges, hackathons, and technical workshops.
- **Co-ordinator, Dance Club @ NIT Patna**: Mentored fellow students & juniors for dance performances for cultural events
- Volunteered in **College TechFest (Corona @ NIT Patna)**: Assisted in organizing coding competitions and managing event logistics, enhancing teamwork and leadership skills.