KANAK CHAUDHARI

cosmicoppai@protonmail.com | Blog | GitHub

EDUCATION

Savitribai Phule University (Pune University) Bachelors in Information Technology (9.57/10)

WORK EXPERIENCE

Full Stack Software and Infra Developer: PriceLabs

2023.9-Present

Tech Stack: Ruby, Rails, Redis, MYSQL, Jenkins, Elastic, PMM, HTML, CSS, JS, Python, Flask, FastAPI, Bash, Docker, Percona-xtrabackup, gunicorn etc.

Currently, I work here as a full stack developer, mainly working on Infrastructure and DevOps along with building features using Ruby on Rails stack.

• Infrastructure

- ❖ Managed the Scraping Architecture of the company, which is mainly responsible for scraping occupancy pricing and listings meta-data of over **100 million** listings, also contributed actively by writing new scrapers to meet the overcoming demands.
- ❖ Built and maintained PMM dashboards and Grafana alerts for critical infrastructure, ensuring real-time monitoring and proactive issue detection for key components.
- Developed a streamlined Jenkins pipeline to fully automate the deployment of scrapers, significantly improving operational efficiency and reducing manual intervention.
- ❖ Build the Internal Proxy to spoof TLS fingerprints to bypass blocks and rate limit for **350000** requests daily.
- ❖ Led a small team to architect and implement a highly scalable, cost-efficient backup solution using XtraBackup, Docker clusters, and Ruby. This in-house system, designed for portability and fault tolerance, saved the company hundreds of thousands of dollars by automating the periodic backup of all databases and seamlessly replicating data across multiple object storage platforms.
- ❖ Managed and utilized Ansible playbooks to simplify and automate infrastructure management, enhancing operational efficiency and reducing manual configuration tasks.
- ❖ Implemented robust monitoring and failover mechanisms for the ELK-based logging solution, ensuring high availability and seamless recovery during system failures.

• Full Stack Devlopment:

- ❖ Developed key features using Rails, MySQL, HTML, CSS, JavaScript, jQuery, and Redis, contributing to both the backend and frontend of the application.
- Successfully integrated PMS with the app, resolving integration issues and ensuring seamless data synchronization.
- Designed and optimized database schemas in MySQL, enhancing application flow and future extensibility.
- ❖ Built efficient APIs and frontend components, focusing on performance and user experience.
- Delivered notable features such as billing management, price updates, note-taking, and the ability to combine listings.
- Optimized database queries, debugged deadlocks, and resolved slow queries to improve application

performance.

❖ Mentored junior developers, providing guidance through proactive PR reviews and promoting best coding practices across the team.

Software Developer: Ryo Currency

2021.10-2022.10

Tech Stack: Python, Django, Postgres, Nginx, Sanic, Docker, JS, MitmProxy, bash, Matplotlib.

At Ryo Currency, I developed and managed a full-stack application, overseeing the entire lifecycle from initial planning and database design to DevOps implementation. Additionally, I collaborated with a team to build a high-performance bot network and optimized search indexes using Manticore, ensuring efficient data retrieval and system scalability.

- Developed advanced bots to mimic mobile applications, parsing requests through MITM and extracting app keys via decompiling and heuristic methods.
- Wrote scripts to efficiently encode telemetry data into binary format, optimizing data transmission and storage.
- Built an internal tool to visualize Apache logs, serving real-time graphs through a Sanic server integrated with Nginx for streamlined performance.
- Authored a tool to collect and analyze posts and comments from Reddit, enhancing data collection and content insights.
- Designed and deployed a REST API using Django and Postgres, capable of handling over millions of records, ensuring scalability and reliability.
- Developed a UI for searching and filtering deleted posts/comments, providing enhanced data retrieval functionality.
- Dockerized the entire stack, including Django backend, web scraper, Nginx, and Certbot, to improve portability and deployment efficiency.
- Optimized search functionality, reducing search time by approximately 200%, significantly improving user experience and system performance.

PROJECTS & OPEN-SOURCE CONTRIBUTION

LiSA (Author).

https://github.com/CosmicOppai/LiSA

- Desktop Application which allows **streaming and downloading anime** & **manga** bypassing ads and popup.
- Features include **stream video in in-built player** or on VLC and MPV, **download multiple episodes or chapters in parallel**.
- Integration with popular media players such as VLC and MPV and supports multiple OS.
- Other functionality includes trending page, watch-later & download manager.
- Over 100 stars across GitHub and thousands of downloads.
- Tech Stack Python, Starlette, Electron, React, FFMPEG, Puppeter, Tauri, pyinstaller.

PyqtGraph (Committer)

https://github.com/pyqtgraph/pyqtgraph/pull/2236

- Fast data visualization and GUI tools for scientific/engineering applications
- Fixed the critical bug which was crashing the App on right click
- Raised the issue about error in renaming the node

Ayur (Author)

Ayur-service/engine /HackNuthon 4.0

- AYUR is a life-saving project designed to efficiently store and access critical patient information during emergencies. It provides a comprehensive system for accessing a patient's medical history quickly and effectively.
- Key technologies used include React for the frontend, Python for backend services (Flask, Django), and Docker for containerization.
- AYUR also utilizes MongoDB for microservices, PostgreSQL for user authentication, Redis for caching, and Nginx for routing.
- The project includes interfaces for both users and hospital administrators, with detailed API documentation for different services. A demo showcasing the user interface and functionality is available.

SKILLS

- Languages: Python (Proficient), Go (Proficient), Ruby, JS, C, Bash.
- Frameworks: Django, FASTAPI, Flask, Rails, PYQT5.
- Databases: Postgres, CockroachDB, Cassandra, MongoDB, MYSQL.
- Cloud: AWS, Digital Ocean, Linode.
- Others: Docker, K8s, Jenkins, Ansible, CI/CD, Nginx, envoy, gRPC, Redis, Networking, Reverse-Engineering, system-design.
- **Spoken-Languages:** English (Business), Japanese (Conversational)

ACHIVEMENTS

- Semi-Finalist in All India Hackathon at Charotar University.
- Winner of the All-India Hackathon in Mumbai among 336 participants (2023).

Blue texts are hyperlinks.