Saivenkat Ajay D.

352-740-6833 | ajaydprof@gmail.com | linkedin.com/in/ajayds | github.com/ajayd-san

EDUCATION

University of Florida
Master of Science in Computer Science   *Aug. 2023 – May 2025*

Manipal University Jaipur
Bachelor of Science in Information Technology   *Aug. 2019 – Aug 2023*

TECHNICAL SKILLS

Languages: Go, Python, Javascript, SQL
Technologies and Frameworks: React, Git, Linux, Docker, PostgreSQL, Redis, AWS, Flask, OAuth, REST
Skills: Backend Development, Data Structures and Algorithms, Object-oriented design, CI/CD, Agile Development, Unit and Integration Testing

EXPERIENCE

Data Engineering Intern   June 2022 – Aug. 2022
Terra Economics and Analytics | *Python, Pandas, PostgreSQL, AWS*
- Spearheaded the execution of the ETL process for transforming **7 large-scale property deeds databases**, ensuring seamless data extraction, transformation, and loading into the company's systems
- Maintained parsing accuracy of over **95%** across transformed datasets, by implementing regex techniques during the data transformation phase of the ETL process
- Revamped the company's proprietary data transformation framework, **enhancing parsing accuracy from 5% to 95%** in previously underperforming areas through meticulous debugging and analysis

PROJECTS

goManageDocker | *Go, Bash, Git, Github Actions, Docker, Podman*   May 2024 – Present
- Built a feature-rich Terminal UI tool for efficiently managing Docker and Podman objects
- Successful open-source project with over **550 Github stars and 2000 downloads**
- Optimized memory usage by **80%** compared to Docker Desktop by eliminating background services like Docker Scout and reducing resource overhead
- Reduced average object management time by approximately **15 seconds** by implementing VIM motions for navigation and sensible key bindings for various actions
- Integrated **continuous deployment(CI)** pipeline using GitHub Actions to automate testing and deployment process
- Developed global API interfaces to enable seamless support for Podman objects, creating the **only tool in the market to support both Docker and Podman services**
- Applied **Test-Driven Development (TDD)** to validate key operations, ensuring seamless functionality and reducing regression risks during feature updates

Metered REST API server | *Rust, PostgreSQL, Git, AWS, Docker, REST*   Jan 2024 – Feb 2024
- Engineered a performant asynchronous REST API server using Rust with built-in mechanisms to generate and track API keys
- Deployed to an **AWS EC2** instance using docker containers to ensure easier development and deployment
- Utilized message-queue architecture to eliminate race conditions during quota updates in a PostgreSQL database

EasyTorch - Pytorch framework | *Python, Pytorch, Git*   Aug 2023 – Sep 2023
- Devised and built an easy-to-use Pytorch framework for image classification tasks by employing the OOP paradigm
- Adopted widely used techniques like **unit testing and static typing** to facilitate easier development

OPEN SOURCE CONTRIBUTIONS

Flask
- Investigated and minimized faulty static typing error frequency by **20%** by rectifying typing definitions of methods
- Diversified supported variable types in Flask's JSON encoder by suggesting ways to add Decimal object support

Redis
- Identified and resolved system hang issues in Genetic Object Mapping caused by missing redisJson installation