Saivenkat Ajay D.

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Education

University of Florida May 2025 Master of Science in Computer Science GPA: 3.78/4.0

Manipal University Jaipur

Bachelor of Science in Information Technology

May 2023 GPA: 3.4/4.0

Languages and skills

Languages: Python, Golang, Rust, Javascript, Java, C++

Technologies and Frameworks: Git, Linux, Docker, Pandas, Oracle SQL, PostgreSQL, AWS, Flask, OAuth

Skills: Backend Development, Data Engineering, Cloud, CLI Development, Agile Development, Unit and Integration Testing

Experience

Terra Economics and Analytics

Data Engineering Intern (Transformations)

Tech-Stack: Python, Pandas, Postgres, AWS

(June 2022 - August 2022)

- Spearheaded the design and execution of the ETL process for transforming multiple large-scale property deeds databases, ensuring seamless data extraction, transformation, and loading into the company's systems
- Maintained more than 95% parsing accuracy 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 - A TUI to manage docker objects (github.com/ajayd-san/gomanagedocker)

- Built a feature-rich TUI tool in Golang for efficiently performing tasks like listing, deleting, execing, pruning, and running docker objects
- Reduced average object management time by approximately 15 seconds by implementing VIM motions for navigation and sensible key bindings for various actions
- Actively maintained open-source project with about 100 stars and active community contributions

Metered API server (github.com/ajayd-san/metered-api-server)

- Engineered a performant async API server using Rust with inbuild mechanisms to generate and track API keys
- Deployed to an AWS EC2 instance using docker containers to ensure easier development and deployment
- Used Inter-Thread communication channels to eliminate race conditions during quota updation on Postgres database

EasyTorch - Pytorch framework (github.com/ajayd-san/easyTorch)

- 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 (Popular micro web framework)

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

Httpcore (Backend for httpx, an HTTP client)

• Diagnosed and repaired inconsistent 'Unsupported Protocol' errors which impacted 100% of the user base by handling certain exceptions explicitly