

VENKATA SAI SWATHI VELICHETI

+1 571-585-2993 | swathi.velicheti08@gmail.com | [LinkedIn](#) | [Portfolio](#) | USA

PROFESSIONAL EXPERIENCE

RJ Systems Inc

Software Developer

Sep 2024 - Present

- Engineered **end-to-end RESTful APIs** for **employee management** systems, enabling seamless **CRUD** operations and robust access control; reduced data retrieval time by 50% while ensuring compliance with security protocols.
- Designed **backend logic for automated invoicing systems**, integrating time-tracking data and fixed-rate calculations, streamlining invoice generation and ensuring accurate financial records.
- Implemented automated **asynchronous background jobs** for **email** and **SMS notifications** using third-party integrations, improving communication efficiency and system scalability.
- Integrated automated **unit tests**, improving **test coverage** by 20% and ensuring software reliability.

Infosys Ltd

Software Developer(Back End)

Feb 2017 - Jan 2022

- Developed and maintained **scalable RESTful APIs** using **Python & Django** integrating with high-traffic enterprise systems.
- Optimized **API performance** and system-level architecture by applying **data structures & algorithms**, reducing response times by 20% and improving system scalability through **code refactoring**, **PostgreSQL query optimization**, and **caching strategies**.
- Implemented **robust data validation** and **error handling**, decreasing incorrect claims submissions by 25%, improving accuracy.
- Designed and extended API endpoints** to meet evolving business needs, accelerating feature releases by 20%.
- Collaborated with **business stakeholders** and **cross-functional teams**, including business analysts, frontend developers, and project managers, to align **architecture** and **API designs** with business objectives and user needs, ensuring alignment on project goals.
- Enhanced API security and compliance by implementing **OAuth2**, **JWT**, **role-based access control (RBAC)**, and secure data encryption protocols for regulatory compliance in financial systems.
- Led version control and CI/CD pipelines with **GitLab**, **Jenkins**, ensuring seamless deployment, infrastructure automation, and **cloud-based architectures** across **AWS** and **GCP environments**.
- Developed and documented **system architecture designs** and **strategies** for cloud-based platforms, ensuring scalability, security, and high availability for enterprise applications.
- Monitored **API performance** using telemetry tools like **Postman**, **New Relic**, and **Swagger**, identifying and resolving bottlenecks.
- Contributed to **debugging** and **logging frameworks**, improving monitoring capabilities and system observability.

PROJECTS

Cinematic Review Platform | MERN stack web application enabling users to search, rate, and review movies, people, and TV shows, enhancing cinematic engagement

- Designed and developed a distributed web application, implementing advanced **search features** for movies, people, and TV shows, alongside **dynamic review** and **rating** functionalities, significantly enhancing user engagement
- Leveraged **React.js** to design a **responsive** and intuitive **user interface**, improving usability and overall user satisfaction collected data to downstream applications through **Node.js** backend.
- Deployed the **Single-Page Application** on **Heroku** for optimal scalability and performance, while prioritizing **web application security** and **data integrity** to ensure reliable operation.

Calorie Tracker | Django-based Calorie Tracker app that calculates dietary intake and exercise recommendations based on real-time data, enhancing personalized health management.

- Developed a **Calorie Tracker** app using **Django**, optimizing **CRUD operations** and implementing **robust authentication** and **authorization** for secure user access.
- Created **personalized health features** utilizing real-time data analysis to **automate dietary intake calculations** against **BMI** and **exercise recommendations**, enhancing user engagement.
- Deployed and optimized applications on **AWS (EC2, S3)** and **GCP**, ensuring **high availability** and **fault tolerance**.

SKILLS

- Programming Languages and Engineering** : Python, C, JavaScript, SQL, Data Structures & Algorithms, Testing, Code Optimization, Bash/Shell Scripting, NOSQL
- Web Development** : HTML, CSS, Bootstrap, Node.js, React.js, Express.js, REST API Integration, Responsive Web Design, API Security (OAuth2, JWT), JSON, Cross-Browser Compatibility
- Data Engineering** : SQL/NoSQL, SQLite3, PostgreSQL, MongoDB, Hadoop, Spark, Kafka, Terraform
- Machine Learning & Data Science** : TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV, NumPy, Pandas, and Seaborn
- Technologies/Frameworks**: Django, Flask, Tableau, Linux/Unix, Git/GitHub, AWS, Azure, GCP, Heroku, Kubernetes

EDUCATION

University of New Hampshire

Master's in Information Technology, GPA: 3.97