

PRUDHVI ARUN CHEKKA

prudhviarun.ch2@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#) | (720) 225-7386 | Athens, GA

"A committed team player and an enthusiastic learner with 5 years of experience as a Developer in multiple Agile teams. Proficient in a wide range of programming languages, tools, and technologies, with a strong foundation in computer science concepts".

EDUCATION

University of Georgia, Athens GA, USA

January 2023 – May 2024

Master's in Computer Science

GPA: 4.0

Courses: Advanced Distributed System, Advanced Information Systems, Data Science, Algorithms, SE, DBMS, Computer Networks.

SKILLS

Programming Languages/Tools: Python, Java, JavaScript, HTML, CSS, React, SQL, AWS, Azure, Git, Jenkins, CI/CD, Docker, PyTorch, Spark.

Key Skills: Django REST Framework, Flask, Machine Learning, Data Modeling, Data Science.

WORK EXPERIENCE

Senior Python Developer, General Electric, Bangalore (India)

July 2021 – December 2022

- Build **REST API functions** using Flask framework, essential for all lines of business in GE to execute over 500 ETL tasks daily in **AWS**.
- Leveraged **React** for frontend development, enhancements and bug fixing to ensure seamless user experience and optimal functionality.
- Enhanced **JSON parser** to efficiently ingest data from diverse sources including Splunk, Elasticsearch, Azure, Intune, MobileIron, Redshift, Amazon S3, LDAP, MySQL, Oracle, PostgreSQL, and Box.
- Integrated and troubleshooted an ETL integrity checker tool, leveraging **regex patterns**. Implemented custom notifications using **AWS SNS** and **AWS API Gateway** to send reports and updates on thresholds.
- Worked with comprehensive **AWS pipeline** management system using Python, **Boto3**, and Docker, enabling deployment and orchestration of **AWS ECS, EC2, Fargate, Event bridge**, and **Lambdas**.
- Spearheaded the redeployment feature, facilitation seamless updates across 500 ETL's, Lambdas, Lambda layers, and Fargates stored in **ECR** in a single operation.
- Employed **multi-threading** and **lazy loading** techniques to optimize code, resulting in **40% reduction** in execution time for data ingestion.
- Implemented continuous integration and deployment (**CI/CD**) **pipeline** using GitHub triggers and **Jenkins**, enabling automatic deployment upon code push to the Git repository, streamlining the development and deployment process.
- Thrived in an agile, rapid paced environment with distributed teams of both technical and non-technical individuals, fostering successful collaboration and communication.
- Assumed end to end ownership and comprehensive responsibility for projects, proficiently steering them from the proof-of-concept stage to successful deployment in the production environment.

Software Engineer, Tata Consultancy Services (Client: NYL), Hyderabad (India)

June 2018 – July 2021

- Designed and developed more than 50 Control Reports to test more than **450K** policies and **80,000K** transactions during a data migration employing **SSIS** and **Python Automation**.
- Automated querying and comparison of data between **Oracle** and **SQL Server** databases using **linked server** functionality.
- Contributed to the development of over 200 automation test cases leveraging the Orchestrator tool. This significantly streamlined the testing workflow, resulting in a 30% improvement in accuracy and a 40% acceleration in the policy validation process.

PROJECTS

House Price Predictions | Advanced Regression Techniques - Kaggle

- Led Exploratory Data Analysis (EDA) to unveil patterns and outliers on **79** feature variables.
- Performed data preprocessing to handle missing values, categorical variables by employing data imputation, normalization, and one-hot encoding, ensuring an optimized dataset for advanced regression analysis using NumPy and Pandas.
- Executed **Model Development** by utilizing techniques such as **Grid Search** for Hyper Parameter Optimization and **Kfold Cross-Validation**.
- Enhanced predictive data models using **stacked Regression** and **ensemble methods**, for effectively combining the strengths of multiple models to achieve superior predictive accuracy and stability which improved the **RMSE** score from **0.11** to **0.074**.

ScalaTion Project | Computational Data Science

- Actively contributed to the ScalaTion project as a Research Assistant, working in the development of **Regression Trees** to facilitate optimal data splitting at greater depths within a comprehensive modeling using **Scala**.
- Implemented **feature bagging** approach to enhance the versatility and performance of **Random Forests**, mitigating overfitting.
- Engineered a **gradient-boosting** algorithm, showcasing adeptness in implementing and optimizing machine learning algorithms.
- Conducted comparative assessments against **scikit-learn's** libraries and ScalaTion, achieving a correlation of 98%.

Text to SQL generator | Optimizing LLM for querying database.

- Created a **Text to SQL chatbot** with Langchain to access OpenAI API's, LLM and streamlit, applying Prompt Engineering, Chain of Thought, and Zero-shot Learning techniques.

Online Bookstore | E-commerce website

- Built a **full-stack e-commerce website** using Python with the Django Framework for the backend, HTML, CSS, and JavaScript for the frontend, and SQLite for the database.