#### Govinda Sri Charan Duggirala

Baltimore, MD | dgsricharan@gmail.com | +14108149588 |LinkedIn | Github

#### Education

M.S., Information Systems, University of Maryland Baltimore County, Baltimore, MD, (GPA: 4.0/4.0)

Aug 2021 - Jun 2023

Course Work - Decision Technology Systems, System Analysis and Design, Advanced Databases, Intelligent Systems, Data Science

B..Tech., Electrical and Electronics Engineering, Crescent University, Chennai, India. (GPA: 8.09 / 10)

Jul 2015 - May 2019

• Course Work - Object Oriented Programming, Data Structures, Computer Networks, Internet of Things,

#### **SKILLS**

Programming Languages and Databases: Proficient in Python, Javascript, PostgreSQL, MongoDB, Neo4j.

Familiar with C++, R, Golang, Powershell

Technologies: NodeJS, ReactJS, Django, Flask, Docker, Tensorflow, Scikit Learn, OpenCV, SciPy, PySpark, Databricks

Tools and OS: Github, Gitlab, GIT, Gerrit, ServiceNow, Visual Studio Code, Azure, AWS, Linux, Redhat.

#### WORK EXPERIENCE

Software Engineer, Seaant Web Technologies, Chennai, India.

Dec 2020 - Jul 2021

Technology Stack: Python, Rest APIs, Flask, Azure, YAML, YAQL, ServiceNow, Linux, GIT, MongoDB

- Facilitated the development team in creating, testing and deploying cloud automation workflows using **YAML** templates for **Azure** and **AWS** platforms. The deliverable was to create a 100% process automation for our clients using Azure Rest APIs for Provisioning, Modification and Termination of VM and SQL Instances.
- Programmed Python API calls which involved encryption, decryption using RSA and SHA256 to integrate ServiceNow tools with product platform and built alert functions for ServiceNow tickets.
- Resolved 100+ customer modification and deployment requests for cloud resources like the VMs and SQL DBs for various clients like HCL, cloud enablers, Leo Pharmaceuticals.
- Collaborated along with the compliance team for building security policies based on NIST, CIS-GCP and HIPAA framework to
  check violation in Azure Accounts, Azure Databases and Azure Resources.
- Restructured old code using Flask API's and increased system efficiency by reducing runtime to 50%.
- Added new workflows to monitor logs for custom APIs in Azure Database and to generate reports by fetching details of VM backup reports, inventory resources, cost estimation and other crucial parameters.
- Adaptive learner, mastered loading, cleaning, transforming, storing and reporting data for business operations. Proficient in implementing an agile approach by facilitating exercises such as scrum meetings and sprint planning. Coherently discussed approach for onboarding new systems and ensured quality deliverables. Trained teammates on the compliance policies.

**Product Developer,** Beez Innovation Labs, Chennai, India.

Apr 2019 – Nov 2020

Technology Stack: Python, Nodejs, PostgreSql, Opency, Spacy, Neo4j, Microsoft LUIS, RASA

- Managed various R&D projects which involved numerical optimization, supervised learning, deep learning, Natural language Processing, Computer vision and IoT problems.
- Built an end to end product using **computer vision** to read invoices and extract business information from them which improved our process efficiency and reduced operational time by 80%. The deliverable was to find information from both lattice and non-lattice tables which can be used for order automation in SAP.
- Programmed conversational chatbots using Microsoft Luis and Rasa and incorporated Context, Entities, slots, intents, intent shift management in chatbots to increase automation upto 100%.
- Tested **Neo4j graph db** to see its performance on the existing sql data through ETL process.

## **Projects:**

## Human Activity Recognition (Github Repo)

Sep 2021 - Dec 2021

Used Various smartwatches to collect accelerometer data and build end-to-end pipeline to preprocess the data, Extract time domain and frequency domain features. Implemented multiple algorithms such as KNN, Naive bayes, decision trees and built an ensemble model to improve its performance. Used Confusion matrix, K-Fold and Leave one group out techniques to verify model's performance.

## Heart Rate Variability Analysis ( Github Repo )

Jan 2021 - Feb 2021

Collected ECG signals from IOT devices and Implemented time series analysis techniques to perform analysis. Obtained time domain and frequency domain features from the data by using a moving average technique. Reduced ECG signal noises by using signal processing filters. used visualizations stacked plots to distinguish between their baseline and other activities.

# Mental Stress Detection ( Github Repo )

Jan 2021

Used Multi Model Data from sensors and moving average techniques to extract features and identify time periods where users have experienced cognitive stress. Represented the results using a multi stacked plot for better visualization.

## Invoice Automation ( Github Repo )

Aug 2020

Developed Functional API using CNN to extract continuously written handwritten data from invoices. Identifies Region of interests and extracted information from tabular and non tabular invoices. Implemented Object detection to identify table structures.