GANESH THANU

EDUCATION

Master of Computer Science
(Aug 2021 – present)

North Carolina State University, Raleigh

Artificial Intelligence, Automated Learning and Data Analysis, Design and Analysis of Algorithms, Computer & Network Security, IOT Analytics, Graph Theory

Bachelor of Engineering
(Jul 2015 – May 2019)

Computer Science & Engineering

Osmania University, India

SKILLS

Python, Java, Terraform, C++, C, SQL

Microsoft Azure, Splunk, Azure DevOps, TensorFlow, PyTorch

MySQL, MSSQL

GitHub, Jenkins, Ansible, Docker, Packer, Visual Studio

CERTIFICATIONS

Udemy Complete Python Bootcamp

CloudOps Machine DataAnalytics: Splunk

Microsoft Azure Fundamentals: Cloud Computing

https://github.com/rationalyt

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WORK EXPERIENCE

SOFTWARE ENGINEER, OPTUM (UnitedHealth Group) July 2019 – April 2021

Generated Machine Learning models in **Python** and interactive dashboards in **Splunk** using Search Processing language, Algorithms and Data Analysis techniques that displayed web traffic patterns, usage statistics, anomaly detection, infrastructure utilization.

Exposure to Data Engineering using Data Factory, Azure Python Functions, Synapse Analytics, DataBricks, EventHub, Snowflake, PowerBI.

Designed and deployed a Content Delivery Network with routing and caching rules in Azure using **Terraform**, Python which improved the efficiency of the application by 15 %.

Automated the provision of IaaS, PaaS resources in **Azure** Cloud for a Business Intelligence product using Python, Terraform thereby reducing manual work to 0% and time savings of 12 hours/week.

Conceptualized and developed an alert system in Python for managing expiry of digital certificates which reduced downtime of application to 0%.

Developed an access audit report generation system that identifies access inconsistencies which improved the security posture of the application.

PROJECTS

Wildfire Cause Prediction: Machine Learning models and data analysis techniques are used to forecast the cause of wildfire using parameters such as geography, fire duration, frequency, etc.

Embarrassingly parallel computation on Web for Haze Removal: Developed a model to dehaze a foggy video by employing parallel computations over multiple medium computing power devices by dehazing images derived from the video using XAMPP stack and OpenCV.js

Simulation of Driver Assistance System: Developed an IOT model of DAS with Forward Collision Warning system, Parking Assistance system, Theft Alert system, Weather Reporting system.

Insurance portal: Developed an insurance portal in Microservices architecture using Flask, Angular, Docker, Jenkins CI/CD pipeline, GitHub and deployed in Azure Cloud.

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