VEERENDRA KUMAR KANAGALA

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OBJECTIVE

Skilled and enthusiastic computer science professional with one year industry experience in building data lakes and managing data seeking Master's in computer science to pursue research in the field of Machine Learning and Big Data Analytics.

EDUCATION

Bachelor of Technology, ECE

2016-2020

Vasireddy Venkatadri Institute of Technology, Andhra Pradesh

- Graduated in Electronics and Communications Engineering with 8.04/10 CGPA.
- Published a research paper on "Automatic Drainage Cleaner" in IRJET.
- Received "Academic Excellence" award for the year 2016-2017.

Intermediate 2014-2016

Sri Chaitanya Bharathi Junior College, Andhra Pradesh

- Completed with **97.9 percentage**.
- Participated in state level quiz competition on Mathematics and Physics and received fifth place out of 300 teams participated.

SSC April 2014

A.C.M High School, Andhra Pradesh

- Completed with 9.3/10 CGPA
- Secured second place in state level quiz competition held by Jana Vignana Vedika at Vishakhapatnam during January, 2014.
- Served as School People Leader and organised our school's 25 year anniversary celebration event.

EXPERIENCE

Tata Consultancy Services, Hyderabad, India

Jan 2021-Present

Assistant Systems Engineer | Python, AWS Glue

- Worked in capacity of data engineer in developing data lake for transport analytics centre (TAC) of a European company.
- Migrated the current application from on-premises to AWS with better security and disaster recovery plan.
- Worked on improving the UI and query runtime of the existing application.
- Developed the dashboards for the end users and structured the data in amazon S3 for future analytical purposes.

SKILLS

- Programming Languages: C, Python, Java
- Operating Systems: Windows, Linux
- Web Technologies: HTML, CSS, JavaScript
- Databases: PostgreSQL, Amazon RDS
- Others: AWS EC2, AWS Glue, Machine Learning, MATLAB, Raspberry Pi, Arduino, Git

PROJECTS

Automatic Drainage Cleaner | Python, Raspberry Pi, R-CNN Algorithm

- Automated device which is used to collect floating wastes in the drainages and rivers, it uses R-CNN algorithm for object detection and triggers the motor to collect the waste.
- Received appreciation as best project in automation category at VVIT-IETE chapter technical fest in 2020.

Detection of Diabetic Retinopathy using LBP | *MATLAB, SVM and LBP algorithms*

- The fundus images in first stage are pre-processed which involves disk segmentation and vessel segmentation. In next stage is extraction of features like variance, mean, skew using LBP and watershed algorithms. Classification is done using the SVM by creating a hyperplane and comparing the features with dataset.
- Tested on a dataset of size 10,000 with 94% accuracy.

HTH Drone | Python, OpenSource ArduPilot, ThingSpeak IOT, Raspberry Pi

- Designed a drone for the collection of data points for the weather analysis. The sensors incorporated in drone collect data points which are send to ThingSpeak cloud for visualization and analysis.
- A Camera is also mounted which also collects the data and uploaded into cloud.

FTP to Amazon S3 | Amazon S3, AWS Glue, Python

- The project was aimed to provide a cost optimised solution for transferring data from servers to cloud using Amazon glue.
- Successfully transferred 100GB data.

ACHIEVEMENTS

- Awarded academic excellence award for year 2016-2017 for being the top 5 student at VVIT.
- Secured 3rd place in technical expo held at Vignan University for the project HTH Drone.
- Volunteered for National Service Scheme (NSS) at VVIT and organised adult literacy program and blood donation camps in surrounding rural areas.
- Organised Balotsav 2017- a national level children talent festival as student lead.

CERTIFICATIONS

- Infosys Certified Software Programmer.
- Two times AWS Certified Cloud Practitioner Certification and Solution Architect Associate.
- Basics of Entrepreneurship from Northeastern University Boston in association with APSSDC.
- Micro Processors and Micro Controllers certification form IIT, Bombay.
- Trained on AC-DC drives and Basics of PLC form Siemens COE.