

SUMANTH PASUPULETI

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EDUCATION

Indiana University, Bloomington, Indiana
Master of Science in Computer Science

August 2021-Present

Coursework: Elements of Artificial Intelligence, Applied Algorithms, Cyber Defense Competitions

K L University, Vijayawada, India, **4.0/4.0 GPA**

August 2016-May 2020

Bachelor of Technology in Electronics and Communication Engineering

Coursework: C & Data structures, Object Oriented Programming, Machine Learning, Artificial Neural Networks, Pattern Recognition
Digital Image Processing, Embedded Systems and applications, Signal Processing, Biomedical Imaging, Digital system design

TECHNICAL SKILLS

Languages: Python, Java, C, C#, MATLAB, HTML, CSS, Verilog HDL, SQL, Assembly Level Programming

Databases: SQL Server, Oracle, MySQL, SQLite, SQLAlchemy

Tools & Technologies: Flask Framework, PEGA, NI LabVIEW, Tableau, Docker, Unity Game Engine, Amazon Web Services, Git

Libraries: Pandas, NumPy, Scikit-Learn, Scikit-Image, OpenCV, Keras, Seaborn, ggplot2, matplotlib, SciPy

Machine Learning: Classification, Regression, Clustering, Neural Networks, Self-Supervised Learning, Forecasting

Applications: Audio Processing, Image Processing, Computer Vision, Internet of Things, Embedded Systems.

Others: Arduino Programming, MyRio, MyDAQ.

Professional Certifications: LabVIEW Associate Developer (National Instruments), PEGA System Architect (PEGASYSTEMS), PEGA Senior System Architect (PEGASYSTEMS)

PROFESSIONAL EXPERIENCE

Vkollab Private Limited (an SAP based Startup), Hyderabad, India
Software Engineer

July 2020-July 2021

- Trained on various machine learning algorithms and data visualization techniques.
- Worked as Python Developer for the Project called Business reports which aim to provide Interactive dashboard and data management services to SAP ABAP workflow using data visualization and Machine Learning.
- Developed the Backend for the application using flask and designed the entire backend pipeline for the project.
- Worked with various libraries like Pandas, NumPy, matplotlib, Seaborn, ggplot2 to visualize the data and compared the results with graphs generated using tableau to improve performance and accuracy.
- Played a major role in integrating flask with various machine learning algorithms.
- Played a major role in designing and developing the entire database for the project.

PROJECTS

Astra- Hospital Management System [Python, Flask, MySQL, HTML, CSS, SQLITE, SQLAlchemy, RESTFUL API]

- Developing an application to manage patients and payments etc. for a local hospital in India.
- Designed and developing the complete database required for the project.
- Using flask python framework for implementing the backend and using HTML and CSS to implement the frontend.

Bank Customer Defection Prediction [Tensorflow, Keras, Python]

- An artificial Neural Network trained to detect the chance of customer defection from a particular bank.
- For this project we used one of the Kaggle churn modelling dataset.
- Trained the model using 75% of data and tested with model with another 25% percent of data left.
- Obtained the Accuracy of 88% of the train dataset.

Fastest Laundry Service using PEGA [PEGA, Scrum, Agile]

- Lead a team of 5 to develop an application which offers a laundry service with door-to-door pickup and delivery.
- Entire project is implemented in PEGA using Scrum Workflow.
- Performing design, development reviews at the beginning and the end of each sprint.
- Worked in many areas of PRPC, including configuring Flows, Flow Actions, Activities, Declarative Rules, Correspondence, Circumstancing, Product creation, SOAP & REST Service design and development.

Color Sorting Machine [LabVIEW, Image Processing, MyRio]

- Lead a team of 3 to develop a Model capable of segregating objects based-on their colors.
- Entire code is developed using NI LabVIEW Software.
- Personally, assembled the entire mechanical setup required for the project which includes MyRio boards, DC and AC motors and Digital Camera.
- Obtained the Accuracy of 95% of the training Objects.

PYRO Sales Analysis using Tableau [Tableau]

- Complete Sale analysis based on different categories on Toy manufacturing company sales data