Achyutarama Rao Ganti

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EDUCATION:

- **Ph.D in Computer Science and Informatics (2021 -)**
  Oakland University, MI
- **M.S in Computer Information Systems, Minor in Data Science**   December 2018
  Grand Valley State University, MI   GPA: 3.518 / 4.0
  COURSES: Machine Learning, Data Mining, Computing and Graphics with R, Multivariate Analysis, Databases, System Analysis and Design, Statistical Modeling and Regression
- **B.Tech in Electronics and Communication Engineering, Minor in CS**   June 2016
  Jawaharlal Nehru Technological University, Hyderabad, Telangana   GPA: 3.5 / 4.0
  COURSES: Control Systems, Computer Architecture, Computer Networks, Digital Integrated Circuits, Digital Signal Processing, VLSI Design, Managerial Economics, Signals and Systems

WORK EXPERIENCE

- **Jr. Automation Developer, IFUSION Inc, January 2020- August 2021, East Windsor, New Jersey**
  Designing technical specification documents for Automation Projects. Hands-on experience on UiPath and OpenSpan automation tools. Practical knowledge on creating automations depending on the client requirements. Working knowledge on using HTML objects. Testing, debugging and deploying the automation on both local and server using Pega Robot Manager.
- **Research Assistant/ Data Science R&D Intern, Legal IQ, January 2018 - December 2019, Michigan**
  Working through Grand Valley to provide statistical consulting for a private client. Researching and applying statistical methods to create a marketing product that the client can patent and sell. Tasks included Web scraping using Selenium, data collection and simulation, pre-processing and analyzing datasets with over 7 million public records. Used ML techniques like Social network analysis, clustering, classification etc to identify and group common behaviors among potential targets.
- **Research Assistant, Grand Valley State University, April 2017 - December 2017, Michigan**
  Developed and maintained a web application called 'SPOT' that analyzes the temporal patterns of similar genes belonging to different platforms. Maintained and updated the MySQL database where the user and the gene data was maintained.

TECHNICAL SKILLS

- Programming skills: Python, R, SQL, Java
- Operating Systems: Linux, Windows
- Version Control: GitHub, GitLab
- Tools Used: Tableau, d3js, QGIS, Selenium
- Machine Learning Libraries: Tensor Flow, Keras, Scikit-Learn, Numpy, Pandas

TECHNICAL PROJECTS

- **Stock Market Prediction using Machine Learning algorithms:** Using machine learning techniques like Regression, Trees, Neural Networks and Sentiment Analysis to predict the stock prices.
- **Genetic Algorithm implementation to solve Sudoku:** The idea was to use Genetic Algorithms to explore the fitness landscape and come up with a perfect solution to the Sudoku puzzle. The project was implemented in Python.
- **Predicting Medicare prices for Acute Myocardial Infarction and heart failure using machine learning algorithms:** The main objective was to identify potential indicators behind the medicare prices for the diseases. Used various pre-processing techniques to transform the dataset and trained it over various machine learning algorithms like linear regression, classification and regression trees, random forests, artificial neural networks to find the best and effective method to predict the prices.
- **Using support vector machines to study the gene signatures with high and low risk of recurrence of colon cancer and predicting the likely outcomes:** Microarray datasets (GSE17537 and GSE 17538) were used from the Gene Expression Omnibus database. After pre-processing the datasets, extracted the differentially expressed genes using the LIMMA normalization method and then used the Support Vector Machine algorithm for determining the accuracy of recurrent samples. This project was implemented in R.

- **Sentiment Analysis using Naive Bayes:** Trained a model that could predict the overall sentiment of the document based on a feature vector that it was trained on. Achieved an accuracy of 96%. The project was implemented in Python.
- **Data Analysis in R on the IMDB movie dataset from KAGGLE:** Built a predictive statistical model for the IMDB movie dataset to predict the IMDB rating. Had to use various data cleaning and variable selection techniques to transform the untidy data into a cleaner version, select the significant variables and then used various Regression techniques like Multiple Linear, Lasso and Ridge Regression to predict the imdb rating using the selected variables.
- **Handwriting recognition using Machine Learning Algorithms like Artificial Neural Networks and Logistic Regression:** This is a supervised learning problem implemented in Python using the MNIST dataset. Applied batch and sequential methods on the data achieved an accuracy of 97.2 %.

ADDITIONAL INTERESTS

Psychology, Human Behavior, Decision Making, Reading Articles, Astronomy, History, Physics, Drawing.