Srimanth Agastyaraju

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Education

Indiana University Bloomington

May 2023

Master of Science in Data Science; GPA: 4.0/4.0

Bloomington, IN

Relevant Coursework: Computer Vision, Applied Algorithms, Exploratory Data Analysis, Elements of Artificial Intelligence (A), Applied Machine Learning (A+), Introduction to Statistics (A).

Sreenidhi Institute of Science and Technology

Aug 2020

Bachelor of Technology in Computer Science; CGPA: 9.58/10.00

Hyderabad, India

Experience

Accenture

Sep 2020 — Apr 2021

Full Stack Development Analyst

Hyderabad, India

- Reduced 80% of the manual effort by implementing an automation algorithm that incorporates image processing and extracts data from the scannable PDFs for customer remediation.
- Utilized Python for exploratory data analysis on a sample of customer data to analyze relationships between the data elements originating from multiple systems.
- Streamlined a MEAN stack application for an analytics platform to automate reporting jobs.
- Studied and implemented Full Stack Web Technologies such as MongoDB, Node.js, Express, Angular.js, and React.js.
- Developed a POC REST API(JSON) using Node.js and accessed it in a React app using Axios.

WebileApps Pvt. Ltd.

Jan 2020 — Jun 2020

Software Development Intern

Hyderabad, India

- Remodeled a Java-based Android application using Agile methodologies to fix bugs and follow MVVM architecture.
- Streamlined the data exchange between client and server for an application using REST API (Retrofit2 and GSON).
- Developed a POC app for OCR and Image Recognition using Android SDKs to automate manual transcribing of pages.
- Engineered a website using Spring Boot and PostgreSQL from the ground up.

Sentritec Software Solutions (OPC)

Jun 2019 — Jul 2019

Artificial Intelligence Intern

Hyderabad, India

- Assisted in the development of a dashboard application using Python and told a data-driven story to the leadership.
- Made the dashboards human-readable, presented insights to the stakeholders, and created documentation.

Projects

Optical Character Recognition using Probabilistic models | Python, PIL, NumPy

Nov 2021

- \bullet Deployed a Bayesian network and a Hidden Markov Model to achieve an accuracy of 94.2% over novel data.
- Implemented viterbi algorithm for Maximum A Posteriori (MAP) inference to predict the final character sequence.
- Text data obtained from the documents pertaining to the Supreme court of the United States, available on the web.

Game Playing AI for Tetris | Python, PIL, NumPy

Oct 2021

- Deployed a Game Playing Artificial Intelligence model to achieve a score over 500.
- Implemented expectiminimax algorithm and one-step look ahed to predict the current and the next incoming piece in the Tetris game.

Sentiment Analysis of YouTube Comments | Python, NumPy, Pandas, Plotly, NLTK, SpaCy, Scikit-Learn May 2020

- Achieved an accuracy of 88% over novel data by extracting data using YouTube Data API v3.
- Developed using NLP techniques such as Stemming, TF-IDF, Word2Vec, Logistic Regressor and XGBoost.

Data Explorer | Python, NumPy, Pandas, Plotly, Dash, Scikit-Learn

May 2019

• An application which allows the user to read and clean a relational dataset, build plots off the dataset and allows the user to select the features and the ML algorithm based on the plot info. Developed using Dash by Plotly.

Technical Skills

Programming Languages: Python, R, PostgreSQL, HTML, CSS, JavaScript(Angular, React, Node), C, C++, Java. Developer Tools: AWS(EC2, S3), VS Code, RStudio, Docker, Git, Linux(bash, zsh), LaTeX, Jupyter, Postman, Jira. Technologies/Frameworks: Numpy, Pandas, Matplotlib, Seaborn, Plotly, Dash, Scikit-Learn, PyTorch, NLTK, SpaCy. Machine Learning Algorithms: KNN, Linear Regression, Logistic Regression, Decision Trees, Random Forests, XGBoost; PCA, t-SNE; CNN, LSTM, EfficientDet; Bayesian Inference, Hidden Markov Models; Hypothesis testing, A/B testing.