Amatya Sonbhadra

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EDUCATION

Indiana University — Bloomington, IN
Master of Science in Data Science — May 2023
Vellore Institute of Technology — India
Bachelor of technology in Computer Science and Engineering — June 2020

TECHNICAL SKILLS

Language and Tools: Python (Pandas, NumPy, matplotlib, scikit-learn, Keras, Tensorflow), R, JAVA, C++, C, JMP, AWS, Tableau, Power BI, Apache, Pig, Hive, BigQuery, Sqoop, MS Visio, MS Project, Advanced MS Excel (V/H-Lookup, pivot tables, macros), Jupyter, Angular JS, ASP .NET, MVC, Android Development, Documentum, Microsoft PowerPoint, Microsoft Word

Databases: Oracle SQL, PL/SQL, MySQL, Microsoft SQL Server, Hadoop, Documentum Query Language (DQL)

Analytical Skills: Predictive Modeling, Data Cleaning, Data Mining, Data Visualization, Machine Learning, Linear & Logistic Regression, Statistics, Probabilities, Tree-Based Methods, Neural Networks, Gradient Descent, Clustering, Hypothesis Testing, Data Analysis, Numerical Linear Algebra, Deep Learning, Time-Series Forecasting, Text Mining, Dimension Reduction, Recommender Systems, Naive Bayes, ARIMA, Cost Optimization, Business Decision Modeling

WORK EXPERIENCE

Apisero Inc — India
Data Analyst I — February 2021 – May 2021

- Automated the manual document sorting and classification of insurance documents using RNN
- Pre-processed Data images and implemented OCR on them using Pytesseract, extracted text was stored using SQL
- This unstructured data was transformed into structured data using Tokenization and Named Entity Recognition (NER) was used to extract keywords.
- The Documents and claims were sorted using Naive Baye's algorithm

Wipro - Alight — India
Data science Intern — Jan 2017 – Aug 2018

- Proof-of-concept to meet client's request for a disability feature in their app
- Frame retrieval was done using Python CV2 package and generating sign language database
- A custom CNN was trained on the basic signs and their semantics. It was then optimized by trial and error to achieve the reach the best parameters
- Hand and gesture recognition was done using Contouring
- Created AWS instance to store the project

ACADEMIC PROJECTS

- **Natural Language Processing, French to English Machine Translator:** Implemented a French to English machine translator developed using Pytorch. LSTMs were used to implement the translation with an accuracy of 92%.
- **Image forgery detection using deep learning:** Developed using a modified version of google's MobileNetV2 neural network. Easy to deploy even on all kinds of devices. Use of Machine Learning, Image Processing and Data Analysis to distinguish real and forged image. 98.1% on training, 97% testing accuracy and 96.8% on validation.
- **Visual Analytics (Tableau)**: Visualized video gaming data in a different perspective by generating sales and demographic patterns.
- **Image retrieval using multi texton histogram:** This project presents a novel image feature representation method, called multi-texton histogram (MTH), for image retrieval. MTH integrates the advantages of co-occurrence matrix and histogram. It made the image retrieval based on a given parameter faster and better than standard image retrieval.