ARCHANA LALJI SAROJ

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Github | Linkedin

EDUCATION

CLEMSON UNIVERSITY *2022-2024*

M.S. IN COMPUTER SCIENCE: **GPA: 4**

UNIVERSITY OF MUMBAI *2014-2018*

BACHELOR OF ENGINEERING IN INFORMATION TECHNOLOGY: **CGPA: 8.61**

SKILLS

PROGRAMMING LANGUAGES	C | C++ | JAVA | Python | JavaScript | AngularJS | ReactJS | HTML | CSS
LIBRARIES	Matplotlib | Numpy | Pandas | Scikit-learn | Keras | TensorFlow | PyTorch
DATA ENGINEERING	SQL | PLSQL | Power BI | Data ETL
DEVELOPMENT TOOLS	Git | Docker | VS Code | Visual Studio | PyCharm | Android Studio

EXPERIENCE

TEACHING ASSISTANT, CLEMSON UNIVERSITY *Aug 2022-Present*

- **CPSC 2120 & 2121 -** Algorithms and Data Structure
- **CPSC 2121 & 2151 -** Algorithms and Data Structures and Software Development Foundations
- **CPSC 1011 -** Computer Science 1 Laboratory

INFOSYS, SENIOR SYSTEMS ENGINEER *2020-2022*

•Developed front-end and back-end components for mobile banking servers serving the UK, Canada, Mauritius, and Bahrain within the YONO app.
•Utilized technologies such as AngularJS, Cordova plugins, Java, SQL, HTML, and CSS for comprehensive application development.
•Implemented robust 2-factor authentication mechanisms to enhance the security of the mobile banking application.
•Designed and built RESTful APIs for delivering real-time notifications, ensuring seamless user experiences.
•Contributed to the development of PL/SQL code at Data Access Layers, optimizing database operations and data management.

INFOSYS, SYSTEMS ENGINEER *2018-2019*

- **Blue Shield of California**: Batch job scheduling using Tidal Enterprise Scheduler, creating ORM document.
- **IUT**: Requirement analysis, application demonstrations, testing application.

ACADEMIC PROJECTS AND PUBLICATIONS

IMPLEMENTATION OF GENERATIVE ADVERSARIAL NETWORKS
Trained a discriminator/generator pair on the CIFAR10 dataset utilizing techniques from **DCGAN**, **Wasserstein GANs**, **WGAN-GP** and **ACGAN**

BERT-BASED MODEL TO DO EXTRACTIVE QUESTION ANSWERING
In this project, we used BERT based model to do Extractive Question Answering. We trained a **DistilBERT** model on **SpokenSQuAD** dataset for question answering. The model was fine-tuned on the training set and evaluated using the **F1 score**. The baseline model scored **52.25** while applying performance methods improved it to **54.05**.

VIDEO CAPTION GENERATION USING S2VT
Created a Sequence to Sequence - Video to Text using **GRU**, trained the model using the provided video and caption files. The model's performance evaluation is done using the BLEU score. Our best model **BLEU score = 0.709**

INSURANCE FRAUD DETECTION
Developed a supervised machine learning model to predict fraudulent insurance claims. A dataset with 38 distinct features was used to construct a classification logic for identifying genuine and fraudulent claims.

MEDICAL ASSISTANCE SUPPORT SYSTEM (MASS)
We designed a system called MASS to provide primary healthcare in rural areas using PYTHON Programming Language. The main task included speech-to-text processing, tokenization, embedding, and classification using LSTM. We published the same project as **"Primary Healthcare using Artificial Intelligence"** in Springer Journal.

AWARDS AND CERTIFICATIONS

- **First runner-up in Smart India Hackathon** 2017, organized by the government of India
- **Outstanding academic achievement and dedication award** by Grad-Dreams 2017
- **First prize - State level Poster Presentation** Competition on Innovative Technologies For Rural Development
- **Tata Trust scholarship** award- cash prize awarded for excellent academic performance
- Completed **Machine Learning** course by Coursera
- Completed **Deep Learning Specialization** course by Coursera