Mahendra Sai Divi

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Mahendra Sai

Education

Bachelor of Engineering in Computer Science
MVJ College of Engineering
2020 – present | Bengaluru, India
CGPA (up to 7th Semester): 8.98; slated for completion in Jun 2024.

Skills

Programming Languages — *Python, C++, C, JAVA, JavaScript*

Technologies — *TensorFlow, Keras, Machine Learning, Deep Learning, NLP, Git / GitHub, Front-end Web Development, Computer-Vision.*

Database Management Systems — *Microsoft SQL Server, Oracle Database*

Certificates

Ethical Hacking — *National Programme on Technology Enhanced Learning*

C Training and C++ Training — *Indian Institute of Technology Bombay*

Small Business Marketing Using LinkedIn — *Coursera Project network*

Work Experience

DRDO, LRDE
Trainee
Jan 2024 – Mar 2024 | Bengaluru, India
The LRDE (Electronics & Radar Development Establishment) is a division of DRDO that specializes in the development of radar systems and related electronics for defense applications.

- Spearheaded efforts to reduce processing time and increase efficiency in digital signal processing functions, on General-Purpose Graphics Processing Units (GPGPU) using CUDA.
- Collaborated with team members to optimize algorithms, resulting in significant improvements in performance.

Global Quest Technologies
Machine Learning Intern
Jul 2023 – Oct 2023 | Bengaluru, India
Global Quest Technologies (GQT) renders services in training and placements to SMEs, academic institutions, local authorities, and governmental bodies.

- Developed predictive machine learning (ML) models with the help of Convolutional Neural Network (CNN) and random forest model.
- Prepared reports and presented project results to the clients.

Projects

Practical Demonstration of ECC with FourQ Curve through a Chat Application
Jan 2024 – present

- Implemented a secure chat application to demonstrate the practical implementation of Elliptic Curve Cryptography (ECC) using the FourQ curve. The application ensures confidentiality and integrity of messages through AES encryption and the Diffie-Hellman key exchange algorithm. This project highlights the efficiency and security benefits of ECC in real-world applications.

Renewal/Churn probability prediction of Telecom Customers
Sep 2023 – present

- A Random Forest classifier was built to predict the probability of customer churn rate at a telecom company. Various factors were identified using Exploratory Data Analysis, and the Random Forest model was optimized using different hyperparameters like the number of trees and depth of the tree. The final model showed an accuracy of 85% on the training data set and 80% on the test data set.

Handwritten Digits Recognition using CNN
Aug 2023

- Built a Multilayer CNN architecture for recognizing handwritten digits using Keras on a test data set of 40,000 labeled images (28*28 pixels) of handwritten digits. The model predicted the digits with 96% accuracy on the data set.

Achievements

Foundation Skills in Integrated Product Development (FSIPD)
Workshop
Jul 2022 | Bengaluru, India

- Secured the runner-up position at Foundation Skills in Integrated Product Development (FSIPD) workshop conducted by E-cell of MVJCE for presenting an innovative approach to generate energy using an oscillating motion, July 2022

Implementing FourQ Elliptic Curve Cryptography For Secure Chats
Bangalore, India

- Developed and demonstrated a secure chat application implementing elliptic curve cryptography (ECC) with FourQ.The project showcases advanced cryptographic techniques and contributes to the field of secure communications.

EXTRACURRICULAR ACTIVITIES

Nova innovative compskey
Department of Computer Science and Engineering
Dec 2022 | Bengaluru, India

- Published an article titled ‘Automation- Robots in the Surgical Beat’ in the department magazine, Morph 2.0.