Shantanu Gupta

+91 9752005866 | shantanugupta0412@gmail.com | linkedin.com/in/shantanu | github.com/shantanugupta2004 | kaggle.com/shantanugupta2004

EDUCATION

IIIT Naya Raipur — Raipur, Chhattisgarh
B.Tech in Computer Science and Engineering — *November 2022 – Present*
CGPA: 8.41/10

Swami Vivekananda Senior Secondary School — Raipur, Chhattisgarh
CBSE 12th - 92.4% — *July 2022*
Relevant Courses
Data Structures and Algorithms, Machine Learning, Cryptography, DBMS, AIML, OOPS, Operating Systems, IoT

PROJECTS

Ethereum Based Energy Trading | *Web3, Solidity*

- Developed a decentralized energy trading platform on Ethereum, enabling secure and transparent peer-to-peer energy transactions for over 500 users.
- Implemented an automated matching algorithm in Solidity smart contracts, achieving 95% accuracy in real-time balancing of energy supply and demand.
- Designed intuitive user interfaces with React.js, increasing user engagement by 40% through clear visualizations and seamless blockchain interactions.

Brain Tumor Classification using SpatioSpatial Models | *Deep Learning*

- Trained a Spatio-temporal model as a Spatio-spatial model on around 1500 different healthy and glioma MRI images of brain.
- Engineered and fine-tuned a ResNet (2+1)D model that significantly enhanced the classification accuracy, resulting in a 30 % increase in accuracy compared to regular 3-D models.
- Implemented advanced data augmentation techniques and pre-processing pipelines, including normalization to enhance model robustness and ensure reliable classification outcomes.

File Sharing Server | *Go, TypeScript, PostgreSQL*

- Designed and developed a secure and scalable file sharing platform using Golang and React, enabling authenticated users to upload, manage, and share txt files through unique public links.
- Implemented JWT-based authentication and file authorization middleware, ensuring protected access and reducing unauthorized access attempts by 100%.
- Integrated Prometheus and Grafana for real-time monitoring of API metrics, enabling performance tuning and reducing error rates by 35% .

Social Media Sentiment Analysis | *Machine Learning, React, Flask*

- Created an NLP based machine learning model based on more than a 1,000,000 comments, tweets and reviews to detect user sentiments on Twitter, YouTube and Amazon.
- A full stack web application is made using React and Flask where the user can input the comment and can get the real time sentiment analysis for each of the three platforms separately.
- Added comprehensive multilingual support by integrating the Google Translate API for broader accessibility which enables translation from 243 languages.

TECHNICAL SKILLS

Languages: C/C++, Python, JavaScript, TypeScript, Go, SQL, HTML/CSS
Frameworks and Tools: Node.js, React, Scikit-learn, Pandas, NumPy, TensorFlow, Git, Linux, MongoDB, PostgreSQL, Socket Programming, Docker, Prometheus, Grafana, Jupyter

ACHIEVEMENTS

- Secured 3rd position in DataPunk ML Contest at IIIT Naya Raipur.
- Secured 35th rank out of 3587 competitors in Kaggle Playground Series Competition.