Kriish Solanki

Bachelors Of Technology
Computer Science & Engineering
Minor in Financial Technology (Fintech)

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GitHub Profile
LinkedIn Profile

Education

•Manipal Institute of Technology, Karnataka *Semester-wise GPA: 7.36, 7.18, 8.54, 9.38, 8.76, 8.80, 8.80*
CGPA: 8.37 (Ranked in the top 5% of my graduating batch) B.Tech CSE | 2021-2025

Work Experience

•Jainam Broking Limited, Gujarat *February 2025 - Present*
Quantitative Strategy & Development Intern

- Developing and implementing quantitative strategies.
- Developing a strategy execution platform using Django, FastAPI, MongoDB, and Clickhouse, integrating APIs to fetch, process, and analyze financial data for backtesting, generating buy/sell signals, and visualizing profit/loss trends.

•ThoughtFocus, Bangalore *July 2024 - August 2024*
Software Engineering Intern

- Contributed to the Gen3 Transaction Switch Platform as part of the BDO team.
- Gained experience in transaction processing and technology integration, working on mPOS solutions, particularly TFPay's payment processing.

Projects

• PostIT *Django, HTML, Bootstrap, jQuery*
Department E-newsletter Management System

- Developed a scalable web application to streamline departmental communication and content management.
- Implemented user authentication, registration, and management, along with RBAC, to ensure secure access, post creation/upload, subscription handling, and automated email notifications.
- Built a robust Django backend with SQLite3 for secure data storage and seamless integration.

•TTS Distinction in Human Voices *Python, TensorFlow, Deep Learning (CRNN)*
Human Speech Authentication Model

- Developed a deep learning model to differentiate human speech from text-to-speech (TTS) systems.
- Utilized Convolutional Recurrent Neural Networks (CRNN) and extracted key features (MFCCs, mel-spectrograms, Chroma).
- Achieved an F1-score of 0.88 and an Equal Error Rate (EER) of 18.89% through hyperparameter tuning, enhancing secure voice authentication.

• Non-Touch Input Device *Python, Opencv, TensorFlow*
Hand Gesture Control System

- Engineered a gesture-based interface for hands-free PC control using MediaPipe for hand tracking.
- Developed a quick-access toolbar with character recognition for seamless navigation and interaction.
- Implemented a client-server communication model, enabling gesture-based control across multiple devices.

• Loan Loss Prediction Using ARIMA *Python, Time Series Forecasting, Data Analysis*
Risk Management & Forecasting Tool

- Developed a Credit Risk Indicator (CRI) using outstanding loan balances at various DPD stages and roll rates, applying ARIMA modeling for loan loss forecasting.
- Ensured stationarity using ADF tests and differencing, optimized ARIMA parameters via ACF/PACF analysis, and validated model reliability through residual diagnostics, including normality, distribution, and autocorrelation checks.

Active Research

- **Credit Card Fraud Detection using Homomorphic Encryption:** Leveraged Machine learning & Deep Learning to detect fraud while preserving privacy with homomorphic encryption.

Technical Skills

- **Languages**: Python, SQL, C
- **Libraries/Frameworks**: Scikit-Learn, Pandas, NumPy, Matplotlib, OpenCV, Django, FastAPI
- **Relevant Coursework**:
  - Database Systems
  - Data Structures & Applications
  - Design And Analysis Of Algorithms
  - Object Oriented Programming
  - Machine Learning
  - Deep Learning
  - Operating Systems
  - Financial Econometrics
  - Engineering Economics & Financial Management
  - Discrete Mathematics & Algebraic Structures
  - Computer Networks
  - Probability Theory & Statistical Methods