Berlin, Germany
agneysince2000@gmail.com
https://agneypraseed.github.io

Agney Praseed

(+49)15227153318

Education

Brandenburg University of Technology (BTU), Cottbus-Senftenberg, Germany   Apr 2025 – Present
Master of Science in Artificial Intelligence

National Institute of Technology Puducherry, India   May 2022
Bachelor of Technology in Computer Science and Engineering
   CGPA: 7.73/10

Professional Experience

Publicis Sapient, Bengaluru, India   June 2022 – February 2024
Software Development Engineer

- **API Development**: Designed and implemented new APIs, enhancing platform functionality and enabling seamless data integration.
- **Backend Development**: Proficiently utilized Spring Boot to develop RESTful APIs, optimizing data retrieval and processing for enhanced user experience.
- **Database Management**: Utilized PostgreSQL for database management, writing complex queries to support data-driven decision-making and reporting functionalities.
- **Frontend Development**: Worked with Angular technologies, contributing to improved system efficiency and user experience.
- **Performance Optimization**: Identified and successfully addressed a notable API loading time issue, significantly reducing response time and marking a substantial improvement in performance.
- **System Expansion**: Expanded the system's capabilities by introducing new functionalities such as additional assessment types, anonymous user support, and the ability to share assessments via URL, thereby enhancing the platform's versatility and utility.
- **Full Stack Expertise**: Demonstrated expertise in both frontend (ReactJS, Angular) and backend (Java, MongoDB, AWS) technologies, contributing to end-to-end development and cloud integration.
- **Quality Assurance**: Wrote unit and integration test cases to ensure code quality and reliability. Played a vital role in meeting Non-Functional Requirements (NFRs) such as scalability and performance, ensuring the project adhered to agile methodologies and timelines. .

Technical Skills

Programming Languages: Java, C++, Python, JavaScript, LaTeX, Bash, SQL
Databases: PostgreSQL, MySQL, MongoDB
Tools: Git, Docker, AWS, Azure, JMeter, JIRA, Confluence, Elasticsearch
Libraries/Frameworks: ReactJS, Redux, Scikit-learn, pandas, Hugging Face Transformers, Spring Boot, Node.js, Express.js

Projects

Real-Time Trigger Word Detection System

- Developed an end-to-end deep learning system for wake word detection using an RNN/GRU architecture, enabling accurate real-time trigger word identification from continuous audio streams with 94% accuracy.
- Implemented spectrogram preprocessing pipeline to convert raw audio signals into time-frequency representations, applying 1D convolutions for feature extraction before sequence processing
- Constructed custom audio dataset by synthesizing 10+ hours of audio samples with positive/negative examples and background noise for robust model training

- Designed sliding window approach with overlapping segments to enable real-time audio stream processing with <200ms latency
- Utilized Keras to build complex model architecture combining convolutional layers for feature extraction and recurrent layers for temporal sequence modeling
- Technologies: Python, TensorFlow/Keras, RNN, NumPy, Signal Processing

Car Detection for Autonomous Driving

- Built an end-to-end object detection pipeline to localize cars in road images using the YOLOv2 architecture and pretrained weights.
- Built and Optimized anchor box mechanisms and grid-based prediction system to detect multiple objects per image with precise bounding box coordinates and confidence scores
- Preprocessed and augmented dataset of 5000+ annotated driving scene images, implementing data pipeline using TensorFlow and OpenCV for efficient batch processing
- Technologies: Python, TensorFlow/Keras, YOLO, OpenCV, NumPy, Transfer Learning, Object Detection
-

Certificates

Microsoft Certified: Azure Data Scientist Associate	February 2025
AWS Certified Cloud Practitioner	September 2022

Neural Networks and Deep Learning (Coursera)
Convolutional Neural Networks (Coursera)
Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization (Coursera)
Sequence Models (Coursera)
Fundamentals Of Deep Learning (NVIDIA DLI)
AWS Machine Learning Foundations
Elements of AI (University of Helsinki)
AI For Everyone (Coursera)
The Bits and Bytes of Computer Networking (Coursera)
Full Stack Open (University of Helsinki)
Java Programming I (University of Helsinki**)**
Algorithms (Robert Sedgewick**)**

Languages

- **English**: Full Professional Proficiency (C1)
- **German**: Beginner (A1)

Interests

- Football (viewing and competing) • Deep Learning Enthusiast