Arjay J.G

arjayjg1311@gmail.com | Linkedin | Github | Portfolio

Education

VIT Chennai — Chennai, India
B.Tech in Computer Science and Engineering - 89.5% — *Sept 2022 – Jun 2026*

Chettinad Vidyashram — Chennai, India
CBSE (12th STD) - 92.4 % — *May 2021 – Jul 2022*

The TVS School — Madurai, India
SSLC (10th STD) - 87 % — *May 2019 – Jun 2020*

Projects

Movie Review Website | *HTML, CSS, JavaScript, Next.js, MongoDB, Rest API, Vercel* — Jun 2024 – Jul 2024

- Developed a movie review website where users can log in, rate movies, and write comments, deployed on Vercel
- Designed and implemented a database to store detailed movie records, user ratings, and comments
- Integrated external APIs to collect and process movie reviews, exposing data through an API endpoint for storage and retrieval
- Implemented filtering functionality allowing users to search and sort movies based on ratings and reviews
- Collaborated with frontend developers to integrate backend APIs with the user interface, ensuring seamless interaction
- Prepared project documentation outlining the high-level design components and presented a working demo to the academic review panel

Automatic Inscription Converter | *Python, Tensorflow, OCR, Streamlit* — Nov 2023 – Feb 2024

- Developed a Tamil inscription converter that preprocesses, segments, and analyzes inscriptions using a machine learning model to generate readable Tamil text, aiding preservation of historical documents
- Applied image segmentation with Contour Detection to identify and separate overlapping characters for accurate recognition
- Deployed the application on Streamlit for real-time, user-friendly access to the inscription converter
- Resolved technical blockers during development and ensured smooth execution of machine learning workflows
- Prepared low-level design documentation and delivered a live demo to the academic review panel of Tamil Virtual Academy

Disaster Information Aggregation Software | *HTML, CSS, React, MongoDB* — Aug 2024 – Nov 2024

- Built a web application for the Ministry of Home Affairs (NDRF) that aggregates real-time disaster information from multiple sources including social media, newsletters, and open data platforms
- Developed and maintained the backend using Flask, integrating web scraping (BeautifulSoup) to extract disaster-related data
- Designed and managed a MongoDB database for structured storage and retrieval of disaster information
- Integrated backend with frontend components for seamless data flow and visualization
- Implemented an interactive disaster map using Leaflet.js with OpenStreetMap to display locations and severity levels of disasters in real time
- Automated updates to mark affected regions and developed algorithms for efficient evacuation strategy suggestions
- Implemented an SOS feature to alert NGOs and emergency responders based on disaster severity for rapid response

PUBLICATION

Integrating Visual Language Models for Enhanced Geospatial Analysis in Remote Sensing Aug 2025
16th IEEE International Conference on Computing, Communication and Networking Technologies (ICCCNT) *IIT Indore*

* Authors : Sankar Raja, Arjay J.G, Sheshwat, Dr. Krithiga R, and Dr. Shoba S
* Proposed a two-stage retrieval framework using CLIP-based dual encoders and an intermediate captioning step to improve alignment between visual and textual data
* Leveraged Vision Transformers (ViT) and multi-head attention to refine cross-modal embeddings for enhanced retrieval performance in remote sensing tasks

Technical Skills

Programming: C, C++, Core Java, JavaScript, Python
Technologies: REST API, Machine Learning, Image Processing
Cloud: AWS
Web: HTML, CSS, XML, JSON
Databases: MySQL, Microsoft SQL Server, MongoDB
API Tools: Postman
CI/CD: Git

Certifications

Java Full Stack – Secured Grade: 92%
Databases and SQL for Data Science with Python – Secured Grade: 100%

Awards

1st Prize – Scire Festo, School Science Expo
Bronze Medal – SOF National Science Olympiad (2019-20), School Level