Gurunathagouda M Biradar

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Skills

Languages: C++, Python (ML), Java, JavaScript, SQL
Tools: Git, GitHub, VS Code, MongoDB, Google Colab, Jupyter
Technologies: Machine Learning, Deep Learning, Generative AI, Reinforcement Learning, Full-Stack Development
Frameworks/Libraries: PyTorch, TensorFlow, OpenCV, MERN, Streamlit, Flask,FastAPI, Pandas

Experience

Nokia — Machine Learning Intern *Aug 2025 – Dec 2025*
– Developed ML-based radio propagation loss models using RF theory + regression.
– 4G/5G signal prediction accuracy with FSPL, Hata, COST-231 models.
– Built automated evaluation pipeline for network performance monitoring.

Techmiya Solutions — Intern *Jul 2025 – Sept 2025*
– Developed full-stack modules with machine-learning-enabled features.
– Built API-driven automation components to support intelligent workflows.
– Enhanced UI responsiveness and backend performance across features.

Nuverea Infotech — Intern *Jan 2024 – Jul 2024*
– Built MERN-based admin dashboard for real-time analytics and management.
– Developed dynamic UI components improving interactivity and usability.
– Optimized MongoDB queries for fast, scalable data operations.

Projects

AI-powered Lip-Sync Avatar — Python, PyTorch, Wav2Lip, OpenCV, FFmpeg,pyttsx3 — Link *Jun 2025 – Aug 2025*
– Developed an end-to-end lip-sync generation system that animates static face images to match input audio using Wav2Lip model.
– Integrated face detection, cropping, alignment, and audio preprocessing pipeline using OpenCV and librosa.
– Used pretrained Wav2Lip models and optimized inference pipeline for faster frame generation and reduced latency.
– Automated video assembly using FFmpeg to combine synthesized lip movements with original frames and audio.
– Applications include virtual assistants, AI anchors, educational avatars, and accessibility tools for speech disabilities.

Planova – Project Management Platform — TypeScript, React, MERN — Link *Feb 2025 – May 2025*
– Built a full-stack project management platform enabling task creation, assignment, team collaboration, and progress visualization.
– Implemented user authentication, role-based access control (Admin/Manager/Member), and secure API access using JWT
– Designed Kanban-style workflow UI with drag-and-drop for task states (To-do → Ongoing → Completed).
– Deployed API backend with Node.js/Express and optimized MongoDB queries for faster response times.

Deepfake Detection System — TensorFlow, OpenCV, Scikit-learn — Link *Feb 2025*
– Developed a deepfake classification pipeline for real vs fake face images using CNN-based feature extraction feature selection.
– Used VGG16 pretrained model to extract high-dimensional deep features from images, improving representation quality.
– Applied Modified Grasshopper Optimization (MGO) to select the most discriminative features and improving accuracy.
– Implemented full pipeline: preprocessing, augmentation, feature extraction, selection, training, evaluation .

Certifications

Infosys: Artificial Intelligence Foundation Certification, Explore Machine Learning using Python
Microsoft: Career Essentials in Generative AI course by Microsoft and LinkedIn!
Google Cloud: Google Cloud Engineering Certificate
Oracle: Oracle Generative AI Professional Certification
NPTEL: Reinforcement Learning

Education

Dayananda Sagar College of Engineering 2022 – 2026
B.E. Artificial Intelligence and Machine Learning *CGPA: 8.67/10*

Achievements

Tech Member and Core Team Lead – DSCE
– Contributed to official event websites and ensured smooth execution of department events.
– Led the technical planning and execution of Aventus 3.0, a national-level hackathon with 660+ team registrations, marking a 600% increase from the previous edition. Event was ranked #1 globally on Devfolio for three consecutive days. Managed team shortlisting, platform setup, and all key technical operations.