# Harsh Kumar Banka

Chennai, India

📞 7275059321  ✉ hb8088@srmist.edu.in  in linkedin.com/in/harsh-banka  ⭘ github.com/LordHarsh  🌐 harshbanka.codes

## Education

**SRM Institute of Science and Technology | *8.8***     **Sep. 2022 – May 2026**
*Bachelor of Technology in Computer Science and Engineering*     *Chennai, India*

## Experience

**National Institute of Technology Trichy**     **May. 2024 – Jul. 2024**
*Research Intern*     *Tiruchirappalli, India*
- Developed HRNet model for pose estimation to monitor infant motor skill development using the FiDIP methodology.
- Created workflow to estimate movement of children using predicted key-points of individual frames.

**EmendoAI**     **Oct. 2024 – Present**
*AI/ML Engineer*     *Hyderabad, India*
- Developed a multifunctional AI agent using chain-of-thought methodology, enabling dynamic interaction across cloud services for comprehensive querying, decision-making, and automated task execution.
- Optimized serverless architecture using AWS Lambda, RDS Aurora, and Langsmith, reducing system latency by 80% and implementing an automated GitHub Actions evaluation engine for continuous performance tracking.

**TrainingMug**     **Jul. 2024 – Oct. 2024**
*AI/ML Intern*     *Hyderabad, India*
- Deployed face, voice recognition, and plagiarism check models for AI-based interviews.
- Built pipelines for generating analysis reports and deployed systems on Azure.

**Alexa Developers SRM**     **Nov. 2022 – Present**
*Technical Lead*     *Chennai, India*
- Developed event management service with Express and trigger.dev, automating registration and communication.
- Built club website using Next.js and Sanity, creating interactive user experience with modern animations.
- Contributed to AlexaTree open-source project through API documentation and team technical mentorship.

**Data Science Community SRM**     **Nov 2022 – Present**
*Vice-President*     *Chennai, India*
- Implemented ML models using random forest algorithm resulting in a 40% increase in performance compared to previous LSTM-based approach for AI Chrome extension for validation of links.

## Technical Skills

**Languages**: Python, JavaScript, TypeScript, Java, C/C++, HTML/CSS, MATLAB
**Software Devlopment**: NodeJs, Express, React, NextJs, SpringBoot, FastAPI, Flask, Django, Sanity, MongoDB, SQL, Reddis, Docker, AWS, Microsoft Azure
**AI/ML**: TensorFlow, MLFlow, ZenML, Numpy, Pandas, Data Analysis, Model Development, MLOPs
**Environments**: Linux, Windows

## Projects

**News Insights: Geo-Temporal Keyword Analysis | ⭘*LordHarsh/news-bug***     **PyTorch, NextJs, Appwrite**
- Engineered ML-driven news analysis pipeline using OCR, NLP, and Named Entity Recognition to extract and visualize geo-temporal trends from digital newspapers.
- Developed full-stack web application with React and FastAPI to enable interactive geospatial data exploration of automated news insights.

**Neural Style Transfer | ⭘*LordHarsh/Neural_Style_Transfer***     **Python, TensorFlow**
- Created Python library for style transfer on videos by extracting frames from video and applying style transfer.
- Used pre-trained model from TF Hub based on Fast Style Transfer algorithm by Gatys et al. in 2016.

**Armando IOT | ⭘*LordHarsh/armando-iot-backend***     **Typescript, NodeJs, Express**
- Developed backend systems for automation, using MongoDB to store user data, appliance details, and preferences.
- Integrated LLM for controlling devices through natural conversation, enhancing user interaction.
- Implemented a facial recognition tool to automate devices based on user preferences.

## Achievements

**1st Place in CodeFest Hackathon by SRM Technologies**     **February 2024**
*Project- AuthentiCheck Interview System*     *SRMIST*

**1st Place in DigiZest Hackathon**     **September 2023**
*Project – Armando IOT*     *SRMIST*