MAHESH R

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OBJECTIVE

Skilled in AI model optimization, data analytics, and decentralized applications, with a focus on scalable and high-performance solutions. Seeking roles in AI/ML Engineering, Data Science, Software Development, and Blockchain Development.



EDUCATION

PORTFOLIO

KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY, TRICHY

CGPA - 8.9

Bachelor of Technology in Artificial Intelligence and Data Science

2022 - 2026

SUDHARSAN VIDHYA MANDIR MATRIC HSS, PUDUKKOTTAI

Percentage – 88.3%

HSC

2021 - 2022

SUDHARSAN VIDHYA MANDIR MATRIC HSS, PUDUKKOTTAI

Percentage – 97.4%

SSLC

2019 - 2020

INTERNSHIP

NETO AI (Present)

Chennai, Tamilnadu

Intern

Feb 2025 - Present

 Optimizing LLMs and SLMs, designing Agentic AI frameworks, and applying Knowledge Distillation for efficient and scalable AI.

PRAYA LABS

Thiruvannamalai, Tamilnadu

Junior AI/ML Researcher Intern

Jan 2025 – Feb 2025

• Conducted **in-depth research** and development of AI and ML models to address **domain-specific challenges**, with a focus on innovative solutions. Enhancing algorithm performance by **42**%.

VPRS SOLUTIONS

Pudukkottai, Tamilnadu

Frontend Web Developer Intern

Jun 2024 - Jul 2024

• Streamlined development workflows, increasing efficiency by 18%, showcasing my ability to apply learned skills.

PROJECTS

QUIN-CHECK EVALUATION FRAMEWORK (Applied to HCR)

Jul 2024

• Designed the Quin-Check Evaluation Technique, a five-stage deep learning framework combining line-curve decomposition and predictive scoring, reducing inference and insight generation time by over 25%. Successfully applied it to handwriting character recognition as a real-time use case.

MULTI-MODEL HEALTH DIAGNOSIS WITH MODEL DISTILLATION

Feb 2025

• Developed an AI-driven diagnostic system with ResNet, DenseNet, and VGG, improving diagnostic accuracy by 12% through model distillation. Integrated LIME and Grad-CAM, enhancing interpretability and reducing misdiagnosis rates by 15% in X-ray-based detection of pneumonia, brain tumors, and tuberculosis.

BLOCKCHAIN & IPFS-BASED MEDICAL MANAGEMENT SYSTEM

Mar 2025

- Built a secure medical system using Blockchain, and IPFS, ensuring 100% data integrity and tamper-proof storage.
- Enabled patients to manage records, reducing data breaches by 30%, and ensuring compliance with India's DPDP Act 2023.

CREWAI MCP Q/A ASSISTANT SDK (Agentic AI Integration)

Apr 2025

- Developed a modular Q/A assistant integrating CrewAI, MCP, and Google A2A frameworks with three deployment modes: Basic MCP, A2A Enhanced, and Full Development.
- Enabled parallel agent processing, agent-to-agent messaging, and advanced error handling, improving response reliability and performance by up to 40%.

CERTIFICATIONS

- DeepLearning.AI TensorFlow Developer Specialization (2024)
- Prompt Engineering Specialization from Vanderbilt University (2024)
- Oracle Cloud Infrastructure 2024 Certified AI Foundations Associate (2024 2026)
- NPTEL Certifications
 - Compiler Design (Jan-Apr 2025)
 - Introduction to Database Systems (Jan-Apr 2025)
 - Ethical Hacking (Jul-Oct 2024)
 - Operating System Fundamentals (Jul-Oct 2024)
 - Introduction to Internet of Things (Jan-Apr 2024)

TECHNICAL SKILLS

Languages: C++, Python, Java, SQL Frameworks: TensorFlow, Keras

Developer Tools: Git, IBM watsonx.ai, VS Code, ChatGPT, Jupyter Notebook, MongoDB Compass, Arduino IDE

ACHIEVEMENTS

- Accepted Paper "Distilling Intelligence: Deploying Lightweight Neural Networks on ESP32 for Edge AI", IEEE CVMI-2025, NIT Rourkela.
- Winner (2nd Place) at NCRPAIDST' 2K25, National Conference on Rising Phenomenon of AI & DS Technologies, Er. Perumal Manimekalai College of Engineering, Hosur.
- Winner in the Software Category of Biomedical Engineering Dept's Schwan 2.0 24-hour Intra-College Hackathon.
- Winner in PC Building with a 7.43-minute record at Coimbatore Institute of Technology (CIT), Coimbatore.
- 2nd Place in Paper Presentation at SNS College of Technology, Coimbatore.
- 2nd Place in Prompt Engineering at Kangeyam Educational Institutions, Tirupur.
- 3rd Place in Paper Presentation at Engineers Day, Sona College of Technology, Salem.
- 3rd Place in 36-hour HackFest Hackathon, Erode Sengunthar Engineering College, Erode.
- Shortlisted and participated in GENBRAINIACS25 Hackathon under the Zero Hunger theme, organized by Google Developer Groups OnCampus at PSNA College of Engineering and Technology.

CO CURRICULAR ACTIVITIES

- Active member of ISTE, KNCET.
- Google Developer Groups, NIT Tiruchirapalli Member.
- Participated and Secured top 10 place in MoonLight 2k23 Talkshop.

HOBBIES LANGUAGES KNOWN

Boxing Tamil

BoxingWeight LiftingEnglish

Weight Litting
Computer Hardware Diagnosis
Japanese