### Sai Eeshwar D

MSc Computer Science - Intelligent Systems Trinity College Dublin, Ireland → +91-7338223233 ■ saieeshwar03@gmail.com • GitHub Profile • LinkedIn Profile

#### **EDUCATION**

#### •Bachelor of Technology in Computer Science and Engineering(AI & ML)

2021-25

Vellore Institute of Technology, Amaravati

CGPA: 8.72

#### PUBLICATIONS AND PATENTS

#### •Cetacean Species Classification Model

- Developed a multi-class classification model to identify vocalizations of 93 cetacean species.
- Optimized bioacoustic analysis accuracy using advanced neural network architectures.
- Led end-to-end model development, training, and evaluation.
- Technologies: CNN, CRNN, SoundNet, Bioacoustics, Python, TensorFlow.
- Publication: 2023 7th International Conference on Computer Science, Information Technology and Systems Science (CSITSS), https://ieeexplore.ieee.org/abstract/document/10333321.
- Patent: A System and Method for Classification of Marine Animal Species Using Deep Learning, Patent No. 202341063223, October 6, 2023.

#### **PROJECTS**

### •Analysis of Social Media Sentiments in the Russia-Ukraine Conflict using NLP and ML Methods

- Applied advanced NLP techniques including BERT and VADER for robust sentiment analysis.
- Achieved 90% accuracy in sentiment classification across large-scale social data.
- Contribution: Machine Learning Algorithms, Sentiment Analysis.
- Technologies Used: BERT, VADER, Python, various ML models.

#### •WAV2Lip-HQ Inference

- Implemented state-of-the-art lip synchronization for video dubbing and deepfakes.
- Achieved real-time performance with 30 FPS output and high fidelity at 4K.
- Contribution: Development, Implementation.
- Technologies Used: Python, PyTorch.

## EXPERIENCE

### •Virginia Tech India - Research Intern

May - July 2023

- Proficient in applying audio signal processing and machine learning techniques for heart murmur detection. On-Site
- Strong knowledge of feature extraction methods, including spectrogram analysis and frequency-domain representations, to distinguish murmurs from noise.
- Hands-on experience in developing and evaluating classification models for real-time detection using Python and deep learning frameworks.

### •GoWarm - Generative AI Intern

Dec 2022 - Feb 2023

- Designed and implemented a multi-agent architecture using CrewAI and Python to match LinkedIn user Hybrid needs with client products, enabling targeted warm calls for improved lead generation.
- Developed and tested API endpoints with Postman in collaboration with a team member, ensuring seamless integration with client outreach systems.
- Technologies: Python, CrewAI, Postman, API Development.

## TECHNICAL SKILLS AND INTERESTS

Technologies: Python, Java, SQL, Git, TensorFlow, PyTorch, LaTeX

Frameworks: TensorFlow, PyTorch, OpenCV, Scikit-learn, Keras, NLTK, SpaCy

Spoken Languages: English, Hindi, Kannada, Telugu, Tamil

Areas of Interest: Machine Learning, Natural Language Processing, Computer Vision, AI for Social Good

# Positions of Responsibility

### •Event Lead - Open Source Community

June 2023 - May 2024

- Organized large-scale events including MLH Hackathon, GITTY UP: Learn Git & GitHub, React Bootcamp, TechEden 2.0, Cyber Syndicate, SDG Open Hack, TechCast Ep. 4, and Software Freedom Fest (SFF).
- Led planning and execution efforts, collaborating with teams to ensure smooth delivery of technical workshops and hackathons.