Aryasomayajula Ram Bharadwaj

ram.bharadwaj.arya@gmail.com | 9108832338 | Benguluru, India | github.com/rokosbasilisk Passionate ML Engineer and Backend Developer with a strong research aptitude

EXPERIENCE

ML Engineer

2019 - Present python, t

Musigma Business Solutions, Benguluru

- Designed and implemented semi-autonomous LLM Agent platform for data-analysis
- Implemented RAG support and prompt optimization for LLM agents
- Evaluated hyperparameter optimization algorithms for timeseries models
- Designed automated intra-day trading system
- Implemented auto-hyperparameter tuning for time series models

Backend Developer

2019 - Present

Musigma Business Solutions, Benguluru

- Implemented backend stack for LLM Agent platform
- Maintained internal fork of Microsoft's Autogen framework
- Migrated legacy code from R to Scala
- Designed deployment strategies for ML models on Kubernetes
- Received "Star performer" 6 times and "Impact Award" twice

ML Alignment Theory Research Trainee May - July 2023

Stanford Existential Risk Initiative, Remote

 Underwent AI alignment research training under John Wentworth

EDUCATION

B.Tech Electronics and Communications 2015 - 2019 GMR Institute of Technology, Andhra Pradesh CGPA: 7.53/10

PROJECTS

LLM Agent platform

flask, autogen

Automated data science tasks platform using autogen, deployed for internal use.

Tplusone.Org

Web application for financial market analysis and algorithmic trading visualization.

In-house MLOps platform

End-to-end platform for deploying and monitoring ML models.

Synthetic Debate Data Generation

python, transformers

Platform for generating debate transcripts using GPT-4, benchmarked mistral and pythia models via LoRA finetuning.

Opensource-contributions

Python

Framework for evaluating LLM-generated code in sandboxed environment.

Telugu text recognition

python, torch

CRNN for recognizing strings of Telugu handwritten characters.

SKILLS

Languages: Scala, Python, Java, R

ML: PyTorch, JAX

DevOps: Kubernetes, Docker-swarm

Misc: Akka, Spring-boot

 $\mathbf{AI}/\mathbf{ML} \text{:} \ \mathrm{LLM} \ \mathrm{Finetuning}, \ \mathrm{Transformer} \ \mathrm{architectures}, \ \mathrm{Deep}$

neural networks

AWARDS

AI Alignment Awards

July 2023

www.alignmentawards.com

Winning entry for "goal misgeneralization" track

Honorable Mention

 ${\rm Mar}\ 2022$

Alignment Research Center

For ELK (Eliciting Latent Knowledge) research proposal

Impact Award

Oct 2022, Dec 2023

Musiqma Business Solutions

For exceptional work and implementing LLM-Agent conversation platform

Bronze-position

Feb 2021

 $Build-on-Redis\ Hackathon$

Built natural-language semantic code-search using code-BERT