Jay Yanamandala

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<u>jyanamandala@gmail.com</u> Portfolio: <u>https://jayc279.github.io</u> Deep Learning, ML Engineer <u>Kaggle LinkedIn GitHub</u> <u>Shiny Apps RPubs</u>

"GenAl LLM, Deep Learning. ML Engineer | Prompt Engineering | Analytical Modeling & Hyperparameter Tuning GPT and Deep Learning Models | Committed to Delivering High-Quality Al Solutions to benefit Community"

Dynamic and results-oriented GenAl LLM & ML Engineer with a proven track record of innovation and excellence in analytical modeling and hyperparameter tuning. Bringing forth a strong team-oriented attitude and a passion for delivering high-quality business solutions with precision and predictability.

With extensive experience in fine-tuning hyperparameters for Deep Neural Network models, I am adept at optimizing model architectures and parameters to achieve superior performance and accuracy. My commitment to continuous improvement drives me to explore new avenues in AI and contribute actively to the advancement of the AI community.

By joining your organization, I am confident I will contribute significantly towards GenAl LLM models (HuggingFaces, FLAN-T5, etc..), PEFT, Prompt Engineering, RAG, RLHF, RHAIF techniques. Deep Learning Neural Networks predictive analytics, improving decision-making processes, and driving business growth. With a relentless focus on quality, innovation, and teamwork. I am dedicated to bringing value to your team and organization by harnessing the power of Al to solve real-world problems, streamline processes, and foster innovation.

## Summary

GenAl LLM, and Machine Learning Engineer with a strong background in designing and implementing advanced neural networks and predictive models. Demonstrated expertise in deep learning, natural language processing (NLP), and predictive analytics.

## **Experience**

Stealth Startup

Mar 2024 - Present

Artificial Intelligence Consultant

• Building generative-Al pipeline to evaluate and refine the quality of the output produced by generative-Al systems. Implement Prompt Engineering to improve completions from different Transformer models.

## **Projects/Kaggle Competitions**

- Comprehensive analysis on the <u>explainability of Deep Learning Neural Networks (DLNN) limitations in</u> multiclass classification datasets, highlighting biases and the need for further investigation.
- Designed and executed a <u>34-layer Residual Deep Neural Network for 3D multi-resolution imaging datasets</u>, predicting human vasculature effects in SenNet + HOA project.
- Leveraged <u>NLP techniques on SwiftKey's corpus data to create predictive models</u>, including bigrams, trigrams, and quad-grams, showcased through presentations and <u>Shiny App</u> development.
- Applied fully connected <u>Neural Nets to forecast cardiovascular disease risk in individuals with high obesity</u>, optimizing models based on various factors.
- Developed a fully connected <u>Deep Neural Network to predict customer churn in a banking dataset</u>, enabling proactive customer retention strategies.
- Collaborated with Kaggle community to enhance deep learning algorithms for improved predictions on Convolutional Neural Networks.
- Won multiple 'bronze' medals for notebooks written on hyperparameters search techniques:
   <u>Neural Networks Deep Learning Hyperparameters search</u>

   <u>Keras-Tuner-hyperparameters-search-for-Obesity-Risk-Prediction</u>

Furthermore, brings over 25 years of electronic design experience, demonstrating leadership in software
engineering, quality assurance, and production support. Proven track record in team management,
innovation, and delivering high-quality solutions across global teams.

## **Technical Skills:**

- Gen Al Large Language Models, HuggingFaces, FLAN-T5, GPT3.5, GPT4.0, etc..
- Deep Learning, Predictive Modeling, Data Wrangling, Machine Learning Algorithms, TensorFlow, Keras,
   PyTorch, NLP, Transformers, Data Visualization (matplotlib, seaborn, ggplot), Image Augmentation, GANs,
   Reinforcement Learning, Statistical Analysis, Cloud Platforms (AWS, Google Cloud).
- Proficient in problem-solving, QA methodologies, and testing frameworks.
- Programming languages including Python, R, Perl, PHP, Tcl, Shell, with experience in C++ and C.

• Cloud platforms such as AWS and Google Cloud.

Certificates GenAl LLM (Deeplearning.ai, AWS) (March 2024)

<u>Deep Learning (Deeplearnnig.ai)</u> (2023)

<u>Data Science (John Hopkins University)</u> (2021)

<u>Machine Learning (Stanford)</u> (2023)

<u>Machine Learning (UW)</u> (2021)

**Education** University of Wyoming M.S. Electrical & Electronics, M.S. Finance

To access EDA CV, please click on this link