

KIRUTHIKA SUBRAMANI

(438) 787-7030 | kiruthikas2020ai@gmail.com | [LinkedIn](#) | [Website](#)

PROFESSIONAL SUMMARY

Aspiring AI Professional with a strong foundation in developing and implementing AI solutions. Industry-certified in Data, Machine Learning and Cloud, recognized as an IBM Dual Champion and Google Developer Expert. A prolific speaker and author with over 200 AI talks and 100 published blogs I am committed to driving innovation and ethical AI practices, ensuring responsible and impactful advancements in the field.

EDUCATION

Université de Montréal (MILA)

Master's in Computer Science

Canada

09/2024 - 08/2026

M.Kumarasamy College of Engineering

B Tech in Artificial Intelligence and Data Science

Karur, India

06/2020 - 05/2024

SKILLS

- **Programming Languages:** Python, Java, C++
- **Machine Learning:** Supervised, Unsupervised, Reinforcement Learning (Basics)
- **Deep Learning:** Neural Networks, CNN, RNN, Transformers, Autoencoders
- **NLP:** Text Classification, NER, Sentiment Analysis, Language Modeling, Chatbots
- **Computer Vision:** Object Detection, Image Classification, Tracking, Segmentation
- **Responsible AI:** Bias Mitigation, Fairness, Explainability
- **Cloud Platforms:** Google Cloud Platform specific Data & ML
- **Tools & Frameworks:** TensorFlow, Keras, Scikit-learn
- **Data Engineering:** Preprocessing, Feature Engineering, ETL, Big Data Basics
- **Generative AI:** Model Chaining, RAG, Diffusion Models, GANs, Prompt Engineering
- **Other Skills:** Data Visualization, Model Deployment, A/B Testing, Hyperparameter Tuning

EXPERIENCE

AI Engineer

Jan 2024 – Present

Machine Learning, Generative AI

Enhub.ai

- Spearheaded a shoplifting detection system to prevent retail loss using advanced machine learning models, resulting in reduction in theft incidents
- Tackled Generative AI challenges for clients, developing Retrieval-Augmented Generation (RAG) systems
- Leveraged Vertex AI for scalable solutions

Mitacs Intern

June 2023 – Sept 2023

Reinforcement Learning, Deep Learning, Computer Vision

École de technologie supérieure

- Explored motion transfer within robot teams using multi-agent reinforcement learning and imitation learning techniques
- Developed real-time object detection using YOLO V8 for CHUM Hospital construction site, enhancing safety monitoring

Machine Learning Engineer Intern

Aug 2022 – May 2023

Data Engineering, NLP

Cloudside

- Collaborated with the data engineering team to develop, implement, and fine-tune machine learning models for demand forecasting at Purpelle.com
- Worked extensively on NLP projects, including the development of chatbots and document classification systems, enhancing customer interaction and document processing efficiency

PROJECTS

Early Detection and Severity Assessment of Osteoarthritis using Residual Networks | Deep Learning, ResNet18, MobileNetV2

- Developed a deep learning model to classify knee osteoarthritis severity levels, leveraging ResNet18 and MobileNetV2 architectures for precise image analysis and classification.
- Significantly improved diagnostic efficiency and patient care by enabling early detection and accurate severity assessment.

XGBoost-Gemini LLM Chain for Severity Assessment | *Predictive Modeling, Large Language Model, XGBoost*

- Developed a predictive model integrated with a Large Language Model (LLM) to provide a comprehensive approach to pregnancy risk management.
- Included features such as severity assessment, translation into regional languages, and comparative analysis, enhancing healthcare services' accessibility and accuracy.

Identifying and Mitigating Bias in Recidivism Prediction using Responsible AI | *Responsible AI, Bias Analysis*

- Employed responsible AI techniques to analyze and address biases in recidivism prediction models.
- Promoted fairness and transparency in algorithmic decision-making, ensuring ethical AI practices in the justice system.

Enhancing Clustering with Deep Learning, User Interpretability, and User Interaction | *Clustering, Deep Learning, User Interaction*

- Employed a hybrid approach integrating interpretable clustering (K-means) with deep clustering (autoencoders) to extract valuable insights from data.
- Developed an interactive component allowing for human-in-the-loop refinement of clustering results, enhancing user interpretability and interaction.

BOOKS AUTHORED

- **Generative Artificial Intelligence: Unleashing Imagination.** Amazon KDP, 2023. [↗](#)
- **AI for a Better Tomorrow: Algorithms in Action.** MKSES Publications, 2022. [↗](#)

PROFESSIONAL CERTIFICATIONS

- Professional Machine Learning Engineer
- Associate Cloud Engineer
- Cloud Digital Leader

PROFESSIONAL HIGHLIGHTS

- Google Developer Expert for Machine Learning
- IBM Dual Champion for Data & AI as well as IBM Z
- Google Cloud Champion Innovator
- Women Techmakers Ambassador
- Spotlited as Today's Architects by IBM

KEY ACCOMPLISHMENTS

- **Best Outgoing Student Award** — M Kumarasamy College of Engineering 2020 -2024
- **Winner** — Morocco AI Solidarity Hackathon organized by MILA 2023
- **Winner** — StartupTN SDG Hackathon 2022
- **Runner-Up** — Intelligent Innovators Hackathon and IG-NITE'22 Project Expo 2022
- **Winner** — Yugam Paper Presentation 2021

SUMMER SCHOOL

- **Neuro-Symbolic AI Summer School** | IBM 2022

TEACHING EXPERIENCE

- **Machine Learning Trainer:** Ether Infotech
- **Python Mentor:** Appin
- **Data Science Mentor:** Cybernaut

LEADERSHIP AND ACTIVITIES

- GDSC Lead (22-23)
- Women Techmakers Ambassador
- IBM Z Captain of India
- DeepLearning.AI Organizer
- GCRF Facilitator
- IamRemarkable Facilitator
- Intel Student Ambassador

HIGHLIGHTS

- **Global Tech Talks**
Delivered 205+ AI talk shows across the globe, sharing cutting-edge insights and innovations
- **Prolific Blogger**
Authored 100+ blogs on Medium, delving into Data, AI, and Cloud, and engaging a wide audience
- **Innovative Series Creator**
Published the Cup of Coffee series on Machine Learning and LLMs as LinkedIn Articles, making complex topics accessible and engaging

SPOTLIGHTS

- Spotlited as an amazing IBM's Today's Architects on the IBM Z Ecosystem Showcase global campaign
- Delivered a session as Guest Speaker,Summer Analytics 2024 Bootcamp, IIT Guwahati