Prakriti Pritmani

Boston, MA - prakritipritmani@gmail.com - [<u>LinkedIn</u>] - 8573135350 Looking for full-time Data Scientist/ML Engineer roles.

SUMMARY STATEMENT

Result-driven Artificial Intelligence Masters graduate with 3 years of experience. Proficient in developing end-to-end AI solutions, from data pre-processing to model deployment, with expertise in deep learning frameworks and statistical analysis. Passionate about leveraging AI to address real-world challenges and drive positive impact across industries.

PROFESSIONAL EXPERIENCE

Danfoss Power Solutions

Jan 2024 - Aug 2024

Cambridge, MA

Data Science Co-op

- Scraped monthly external macroeconomic indicators for USA and Europe regions and combined with internal data to train ARIMA for **sales forecasting** process reducing MSE by 50% using Azure DataBricks and Synapse.
- Formulated an **anomaly detection** pipeline to catch faulty pumps and motors prior to sale saving callback losses of \$1.4 million with DBSCAN and GMM clustering.
- Utilized **LLMs** to develop and deploy an internal product chatbot with **Llama-2 and GPT 4** aiding 9000 employees.

 May 2023 Aug 2023

Mayo Clinic
Data Science Intern

Rochester, MN

- Leveraged pixel manipulation techniques through OpenCV and Pytorch to eliminate bias of skin tone via a preprocessing module from an image prior to inferencing, enhancing model fairness.
- Evaluated State-of-the-Art (SOTA) models including **ResNet**, **EffNet**, and **VGG** for classification tasks, optimizing for **precision and recall**. Selected the VGG model based on performance metrics, resulting in an average increase of 15% accuracy across various skin tones.

IBM Sep 2020 - Aug 2022
Data Scientist Bangalore, India

- Led the development of end-to-end ML pipelines, streamlining data preprocessing, model training, and deployment to enhance scalability and performance for Computer Vision problem statements.
- Achieved an average of 40% reduction in training time and improved model accuracy by 5 to 10%.
- Conducted model optimization and pruning between PyTorch and TensorFlow/TFLite for Edge and Mobile Devices, enhancing efficiency and cross-platform compatibility while reducing model size to <10MB.
- Provided weekly mentorship sessions to 10+ new hires on patenting processes and documentation, promoting professional development and innovation within the team.
- Recognized with the IBM IDEAS Award 2021 for Best AI Project in the US Public Market for exceptional contributions to innovation and excellence and an NPS Client Score of 10/10.

Data Science Intern Jan 2020 - Jun 2020

• Engineered a generalized image enhancement pipeline to tackle denoising, deblurring and auto-image generation using **computer vision and reinforcement learning** techniques saving 70% re-work over 6 different projects/PoCs.

PROJECTS

Visual Question and Answering

[GenAI, LLM, CV]

Jan 2023 - Apr 2023

• Fine-tuned Mixtral and Llama - 2 model with COCO and DAQUAR dataset for visually impaired audiences using Regional Proposal network and PixelBert providing 50% more accurate responses.

Multimodal Emotion Recognition

[TFLite, CV, DNN]

Sep 2022 – Dec 2022

• Combined Time-distributed CNNs, XCeption and LSTMs to combine audio, video, and text data to determine the emotion of a characters from Friends TV Show resulting in 88% accuracy over 9 various emotions.

Store Sales Forecasting

[PyTorch, Time Series, PowerBI]

Sep 2023 – Dec 2023

• Implemented a Temporal Fusion Transformer to assess oil, earthquake and economic data for Ecuador family store selling 33 product families: achieving MSE of <0.65 after hyperparameter tuning.

SKILLS

Patents: System Generated Feedback Mechanism for Automatic Image Enhancement,

Dynamic AI models on an autonomous AI enabled robotic device.

Spoken Languages: English [Fluent], Hindi [Fluent], Kiswahili [Conversational].

Programming Languages: Python, R, SQL, Java, NumPy, Pandas, Scikit-learn, Statsmodels, Go

Frameworks: NLTK, TextBlob, Hugging Face, PyQt5, Matplotlib, Git

Tools: Docker, AWS, SageMaker, DataBricks, Tableau, GC VertexAI, WandB, IBM Watson.

EDUCATION

Masters in Artificial Intelligence – Northeastern University, Boston, USA
Bachelors in Computer Science – NIIT University, Rajasthan, India
GPA: 3.9/4.0
GPA: 3.9/4.0
GPA: 3.9/4.0
Jul 2016 – Jul 2020