



Pranav Prakash Chandra

A versatile AI/ML Engineer and an aspiring polymath, inquisitive about various fields and domains, wanting to continuously learn and apply the latest, cutting edge technologies. In this rapidly evolving age of AI and ML, my interests lie in the ethical application of these technologies in healthcare, medicine, and education.

Education

Master of Science in Image Analysis and Machine Learning

Uppsala Universitet

Aug 2021 - Dec 2023

- Introduction to Image Analysis
- Advanced Probabilistic Machine Learning
- Advanced Image Analysis
- Statistical Machine Learning
- Deep Learning for Image Analysis
- Data Engineering

Thesis Project: Comprehensive Study of Brain Age Prediction using Classical Machine Learning and Neural Networks

BE in Computer Science and Engineering

Sri Sai Ram Engineering College

Jun 2016 - Jul 2020

Final Project: Monitoring Mental Health using Physiological Signals

Work Experience

Software Engineer (GenAI)

Jan 2025 - Present

Servion Global Solutions Pvt Ltd, India

- Designed and Developed fully functional hybrid-search powered AI chatbots
- Implemented RAG pipelines integrating text-based LLMs (Claude 3) and speech-to-speech LLMs (Nova Sonic, Polly, Transcribe)
- Engineered scalable Agentic AI workflows for Linux services using Claude 3 and MongoDB.
- Built the necessary APIs and Database Schemas to support the AI workflows.
- Wrote and Engineered Prompts for several AI \ ML models for several analytical and generative tasks.

Machine Learning Engineer(Intern)

Jul 2024 - Nov 2024

Homy, Sweden

- Contributed to developing machine learning pipelines (RAG) with the help of GPT-4, langchain, langgraph and pinecone.
- Developed corresponding APIs using FastAPI
- Worked on the latest cutting edge technologies and experimented with state-of-the-art agents.

Projects

Understanding and Optimizing BrainAge prediction

(12/2023 – 06/2024)

- Implementing Ensemble Neural Network Models to improve and optimize the BrainAge prediction pipeline.
- Implementing gradCAM, Saliency Maps and other XAI algorithms on a custom convolutional neural network to understand its training process for the brain age prediction and using the insights to improve the prediction pipeline.

Prediction of Brain Age using Conventional Machine Learning and Neural Networks

(02/2023 – 12/2023)

Implementing executable brain age prediction pipeline with Machine learning and Deep learning techniques using ScikitLearn and PyTorch.

Comparison of Deep Learning and Machine Learning Models in Classification of Hand drawn Spiral for Parkinson's Diagnosis

(11/2022 - 01/2023)

Provide a comparative analysis of the performance of several machine learning models in identifying Parkinson's and control patients from the features extracted from a pre-trained CNN model (ResNet50)

Vertebrae Segmentation and Labelling for Radiotherapy Application

(09/2022 - 01/2023)

Develop software to segment and label the vertebral bodies in CT images. Integrate the method into RayStation using its scripting API which is written in Python and Visualize the results in RayStation.

Monitoring Mental Health using Physiological Signals

(10/2019 - 03/2020)

Monitoring the emotional state and overall emotional health at regular intervals every day by maintaining a record of the patient's emotional health data.

Skills

Programming Languages : Python, MATLAB, Java, C, C++, C#

Database Technologies : MySQL, PostgreSQL, Pinecone, MongoDB, OpenSearch, MS SQL Server, supabase

Frameworks : PyTorch, TensorFlow, Keras, Scikit-learn, OpenCV, LangChain, Lang-Graph, Next.JS, tailwind CSS

LLM & AI Skills : Retrieval-Augmented Generation (RAG), Agentic AI workflows, Prompt Engineering, Hugging Face Transformers, Vector Databases (Pinecone, Pgvector)

Data Visualization Tools : Tableau, Power BI, Matplotlib, Seaborn

APIs : FastAPI, Flask

Tools & Platforms : AWS, Docker, Git

Environments : Windows, Linux, macOS