# Mohit Ram Kumaragurubaran

mohitrk.ru@gmail.com | +91 9566281124 | linkedin.com/mohitrkru | github.com/mojitrk | Chennai, TN

#### Education

SRM Institute of Technology – B.Tech Computer Science and Engineering w/ AI & ML 9.41 cgpa 2025 The PSBB Millennium School – PCM stream w/ Computer Science 89% cbse board 2021

#### **Work Experience**

Machine Learning Engineer (Intern), GoDB Tech Pvt. Ltd. – Chennai, TN July 2023 - August 2023

- Evaluated cost-effective alternatives to proprietary recommendation engines for insurance policies
- Assessed open-source solutions based on their feasibility, performance, and ease of implementation
- Identified promising alternatives to proprietary systems while significantly reducing licensing costs

#### **Skills**

**Languages:** Python, C++, C#, Javascript, SQL, Shell script (Linux)

Frameworks: Tensorflow, Pytorch, Keras, Flask, Pandas, Seaborn, Node.js, OpenCV, OpenAI Gymnasium

Tools: Git, Jupyter, Docker, Amazon Web Services (AWS), PowerBI

## **Projects**

# Deep Reinforcement Learning Game Agent for DOOM

github.com/mojitrk/deep-rl-agent-doom

- Configured VizDoom environments & trained game agent with Gymnasium in the shooter game DOOM
- Developed an asynchronous training method with Worker-Learner processes to reduce training time
- Reduced training time by 4x compared to conventional methods without degradation in performance

## **Artistic Neural Style Transfer for Creative Teams**

github.com/mojitrk/neural-style-transfer-app

- Developed a neural style transfer pipeline for artwork with emphasis on content preservation
- Built using ComfyUI and Stable Diffusion XL for processing artwork
- Results in saved time and manpower for creative teams looking to enforce consistent style guidelines

#### **Insurance Policy Recommendation Engine**

github.com/mojitrk/insurance-recommender

- Developed an engine that recommends insurance policies to customers based on individual historical data
- Utilized different approaches to work around large amounts of missing or confidential customer data
- Results in 89% accuracy using Correlation Cross Occurrence when minimally recommending policies

# Perspective-agnostic Image Classifier using Superglue

github.com/mojitrk/perspective-based-classifier

- Developed system that can classify images taken in the same environment, even from different perspectives
- Built using Transformer-based local feature matching and Superglue for working with sparse features
- Accurately classifies batches of images taken in the same location using environmental features

# Flask-based Distributed Polling System

- Flask-based Distributed Polling System github.com/mojitrk/millennium-voting-app

  Developed a backend webservice for synchronous polling from multiple end user devices using Flask
- Implemented a .csv-based system for the collection of poll statistics
- Deployed system on 12+ individual devices and utilized for the student body council elections

#### **Conferences and Publications**

Deep Reinforcement-based Learning Agents for Gameplay Strategies, Recent Advancements in Communication, Computing and Artificial Intelligence RACCAI-2024

## Positions of Responsibility / Extracurricular Activities

Student Coordinator, Zypher'24 AI Symposium - Managed a technical event for the symposium, organized participants and activities

Organizing Committee Lead, Millennium MUN'19 - Managed the finance team, delegate registrations and committee allocations

#### Languages

**English** (Native fluency), **Japanese** (Professional Working Capacity), **Tamil** (Professional Working Capacity)