Santu Hazra

SENIOR SOFTWARE ENGINEER – AI/ML

Details

📞 +91-740-663-9000

✉ ec.santuh@gmail.com

[in] [github] [o] [web]

Skills

- DEEP LEARNING
- MACHINE LEARNING
- LARGE LANGUAGE MODELS
- MULTIMODAL MODELS
- GENERATIVE AI
- STABLE DIFFUSION
- NLP
- SPEECH PROCESSSING
- RAG
- LORA,QLORA
- REINFORCEMENT LEARNING
- PYTORCH
- PYTHON
- FASTAPI
- C++
- MLOPS (Docker, AWS Serverless)

Education

B.Tech In Electronics & communication engg,
West bengal university of technology

Interest

Trekking
Adventure Sports
Mountaineering
Swimming
Paragliding

🙎 Profile

- **AI/ML Engineer** with over **9 years** of experience in developing intelligent systems for **humanoid robotics**, focusing on enhancing human-robot interactions through **computer vision** and **natural language processing**.
- Proven expertise in optimizing **machine learning models** for **real-time** applications. Passionate about leveraging **AI** technologies to create engaging, user-friendly experiences.

🗔 Experience

Senior AI/ML Engineer
Machani Robotics — Bangalore | Feb 2020 - Present

- Developed and fine-tuned the **ArcFace** model for **Indian faces**, achieving **92%** accuracy by utilizing the **Indian Movie Faces Dataset** and a **custom dataset** of company employees.
- Implemented a comprehensive **face recognition** pipeline on **NVIDIA AGX** Jetson, integrating **face detection**, **embedding generation**, and **kinematic control** for humanoid robots.
- Designed an **object detection** pipeline using **YOLO v8** for environmental awareness, enabling robust interaction capabilities with the bot.
- Conducted fine-tuning of **Llama 3.2** to integrate company context into the **RAG framework**, optimizing conversational capabilities and user engagement.

Data Scientist
Cognizant Technology Solutions — Bangalore | Apr 2015 - Jan 2021

- Conducted **customer retention analytics** to identify potential **churn**, leading to strategic **promotional initiatives** and increased **client revenue**.
- Developed **customer acquisition** models to prioritize leads based on revenue potential, enhancing resource allocation.
- Executed **customer sentiment analysis** using machine learning to extract insights from consumer reviews, aiding product development strategies.
- Led **distracted driver detection** projects, classifying driver behaviours from 2D dashboard camera images to improve client safety measures.

⊕ Certification

- **Wiley Certified Data Scientist,**
  Credential ID: CZN-CDS-BAN-210819004
- Extensive Vision AI program from
  <u>The School of AI</u>