ABHISHEK SINGH

PYTHON | MACHINE LEARNING | COMPUTER VISION | AI

DETAILS

abhimattx@gmail.com
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SKILLS

Languages: Python, C, Javascript, HTML/CSS

ML & CV Tools: scikit-learn, TensorFlow, OpenCV, GPT API, NLP

Tools: Git/GitHub, VS Code, Streamlit

Concepts: Model Evaluation, Computer Vision, Prompt Engineering, Deployment

PROFILE

AI/ML Engineer skilled at turning innovative ideas into deployable, user-ready products. Experienced in building full-stack AI applications leveraging **Python, GPT (OpenAI), Computer Vision** , and modern deployment frameworks (**Streamlit** , **Fast API**). Proven track record of developing, testing, and launching real-world projects, including multi-source NLP apps, vision-based robotics, and intelligent summarization tools. Strong communicator with a passion for clean, collaborative, and impactful code.

EMPLOYMENT HISTORY

Software Developer at After-School Technical Projects, India

May 2021 — July 2021

- Developed Python scripts to automate data processing tasks, enhancing workflow efficiency.
- Utilized SQL for database management and retrieval, ensuring data integrity and accessibility.
- Participated in code reviews, providing constructive feedback to peers for continuous improvement.

EDUCATION

Tomas Bata University – Zlín, Czech Republic, B.Sc. in Intelligent Systems with Robotics | Expected: June, 2024,

PROJECTS & RESEARCH EXPERIENCE

Pick & Place Robot (Thesis Project)

- Built a camera-to-robot calibration system using OpenCV and ArUco markers
- Enabled ABB industrial robot to perform pick-and-place tasks via calibrated vision input
- Implemented eye-on-base calibration logic and pose-to-motion transformation

ScopeAI

- Built and deployed a multi-source insight extraction app using OpenAI GPT-3.5 for summarizing PDFs, YouTube videos, and news articles.
- Integrated sentiment analysis (VADER), named entity extraction, and prompt-driven insights to deliver actionable knowledge.
- Developed an interactive, responsive UI in Streamlit with custom CSS, ensuring user-friendly visualization and exploration.

GPT Summarizer

- Built an interactive app that summarizes PDF files using OpenAI's GPT API
- Handled document parsing, token-aware chunking, and GPT prompt tuning
- Developed in Streamlit with PyMuPDF and modular architecture