



ABHISHEK SINGH

AI/ML ENGINEER | PYTHON DEVELOPER | LLM, CV & REAL-WORLD DEPLOYMENT

◦ DETAILS ◦

abhimattx@gmail.com

◦ LINKS ◦

[Portfolio](#)

[GitHub](#)

[linkedin](#)

◦ SKILLS ◦

Languages: Python, C, Javascript

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

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

B.Sc. in Intelligent Systems with Robotics, Tomas Bata University – Zlín, Czech Republic

June 2025



PROJECTS & RESEARCH EXPERIENCE

RoboVisionCalib (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
- GitHub: <https://github.com/abhimattx/RoboVisionCalib>

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.
- GitHub: <https://github.com/abhimattx/ScopeAI>

SummarizerOpenAI

- 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
- GitHub: <https://github.com/abhimattx/SummarizerOpenAI>