Manav Chaudhary
AI Research/Engineering, LLM Applications, Product/Program Management

⌂ Website ◉ GitHub Profile in LinkedIn Profile ✉ Email ID ☎ Phone Number

EXPERIENCE

SENTISUM | NLP ENGINEER
February 2025 - June 2025 | Remote | Internship
- → Scaled AI-driven customer support from **30 to 30,000+** tickets using LLMs, cross-encoders, and ModernBERT for summarization, extraction, and ranking.
- → Built the **askSenti** agent with QnA, report-builder, and intent-aware outputs using Python, GPT/Gemini APIs, and agent orchestration.

UNIVERSITY OF BRITISH COLUMBIA | VISITING RESEARCHER
July 2024 - October 2024 | British Columbia, Canada | Internship
- → Collaborated with Dr Fard and Dr Wu on **ClarifyCoder**, a framework enabling LLMs to ask clarifying questions during code generation.
- → Designed novel data synthesis techniques to generate ambiguous, incomplete, and inconsistent programming problems, along with clarifying questions and their answers; then fine-tuned models on this data to enhance clarify-awareness, resulting in a paper under review at ICSE 2025.

MICROSOFT | TECHNICAL PROGRAM MANAGER
May 2024 - July 2024 | Hyderabad, India | Internship
- → Led cross-functional agile teams to deliver **M365 Backup**. Planned future sprints, improved dashboard usability, defined KPIs, and introduced benchmarking. Drove roadmap planning, sprint execution, and aligned delivery with business goals and SDLC timeline.

APPLIED AI RESEARCH CENTRE, I-HUB | HEALTHCARE RESEARCHER
November 2023 - June 2024 | Hyderabad, India | Internship
- → Built and managed image annotation tools using CVAT, hosted on Microsoft Azure. Applied OpenCV for image preprocessing and transformation to improve **detection of oral lesions** in mobile-captured images. Researched color spaces (RGB, LCV, HSL) to optimize annotation accuracy. Contributions supported a publication in **Scientific Reports (Nature) Journal**.

INFORMATION RETRIEVAL AND EXTRACTION LAB | RESEARCH ASSISTANT
May 2022 – Present | IIIT Hyderabad, India
- → Conducting research with Prof. Vasudeva Varma on **LLM evaluation under adversarial settings**, machine-generated text detection, and reference-free dialog metrics; co-authored **4 publications**.
- → Mentored junior researchers through summer sessions and ongoing lab work, helping onboard them to research in NLP and language technologies.

PROJECTS

WHIZTAREEFA | FASTAPI, LLM-AGENT, RAG, GENAI, VECTORDB
- → Developed an **RAG-enabled LLM-powered** system, with agent actions, web search, and text-to-speech functionality for QnA style responses.

MADEMOI-SHELL-E | C, SHELL SCRIPTING, SOCKET PROGRAMMING, TCP/IP
- → Created a **UNIX bash-like shell** with directory management, process handling, piping, redirection, signal and error handling.

WIKISEARCH | TF-IDF, INFORMATION RETRIEVAL, LARGE SCALE DATA MANAGEMENT
- → Built a **search engine on Wikipedia** pages, using parsed 90GB XML Wikipedia dumps, implementing inverted index creation and query-search mechanism.

MINICLASHIA | PYTHON3, OBJECT ORIENTED PROGRAMMING, GUI
- → Implemented a terminal-based 2D recreation of the classic **"Clash of Clans"** game, using Python, incorporating OOPS principles.

EDUCATION

IIIT HYDERABAD
B.TECH. AND M.S. BY RESEARCH IN COMPUTER SCIENCE AND ENGINEERING (CGPA: 9.03/10)
Academic Awards: 1x Research List, 4x Dean's List
TA: Applications of Language Models (2025)
TA: Introduction to Human Sciences (2023, 2024)
TA: Behavioral Research Experimental Design (2023)
TA: Probability and Statistics (2022)
Host -- The IIIT Podcast S3

DELHI PUBLIC SCHOOL GHAZIABAD
CLASS XII: 97% | CLASS X: 10 CGPA | CBSE
Silver Plaque for Longstanding Academic Excellence (Scholar for 7 consecutive years)

SELECTED PUBLICATIONS

Understanding Robustness of LLM Evaluations under Perturbations
ICON 2024

Clarification-Aware Fine-Tuning for Programmatic Problem Solving
Under Review at ICSE 2025

Screening of Oral Cancer Using Deep Learning Models
Scientific Reports (Nature) 2025

Leveraging Topical Embeddings for Annotation Detection in Tweets
SMM4H, ACL, 2024

ACHIEVEMENTS

Google Research Week: One of the top 70 research students selected to attend Google Research Week 2025, India.

Mitacs: Selected for the prestigious Globalink Research Internship, among the top 2% of applicants from India. Funded international research opportunity.

Silver Medal, AI for Social Good Hackathon, STASER Lab, UBC, Canada: Built CareBridge, a multilingual speech-enabled mental health assistant.

OHAI: Organized 8th Oral History Conference, managed logistics, and delivered the concluding speech.

WikiMedia Summit: Organized and managed the Wikimedia Technology Summit, built website for the same.

Bronze Medal, HackIIIT, Hackathon, OSDG, IIIT Hyderabad: Built a washing-machine status update app.