Mihir Panchal

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PROJECTS

Engraph | Mozilla Fellowship | GitHub Website Youtube — January 2024 – June 2025
- Engineered an AI-powered code documentation generator using static code analysis and GraphRAG, that enables LLM-enhanced, structured documentation with interactive dependency graphs for improved code comprehension.

CiteSpy | Downloads 192+ | GitHub Marketplace Semantic Scholar Youtube — August 2024
- Developed a Visual Studio Code extension that enhances coding and research efficiency by automatically scraping and displaying academic paper summaries, titles, and links, streamlining research workflows within the editor.

InsightHound | 100x Buildathon Winner | GitHub Youtube — December 2024
- Deployed an AI-driven research agent with LangChain, boosting startup decision-making efficiency by 126% through data-driven insights and actionable strategies for competitive advantage and product-market fit.

CommentCleaner | Downloads 2067+ | GitHub Marketplace Youtube — December 2023
- Programmed a Visual Studio Code extension to remove comments from source code across 10+ programming languages, enhancing code readability, simplifying maintenance, and boosting developer productivity.

CodeLineLogger | Downloads 683+ | GitHub Marketplace Website Youtube — December 2023
- Visual Studio Code extension in JavaScript, featuring breakpoint logging, conditional logging, variable tracking, customizable log output formats, and levels, enhancing code analysis and debugging capabilities.

ThinQ | *GitHub Youtube* | *PICT TechFiesta International Hackathon Finalist* — April 2024
- Implemented comprehensive educational platform with CRUD operations, video calling, attention tracking, automated note and quiz generation and cloud-based resource management, enhancing remote learning experiences

DealDex | Lines of Code Hackathon Winner | GitHub Youtube — April 2024
- Innovated an e-commerce platform with data aggregation, intuitive search, detailed comparisons, and actionable insights. Utilized web scraping for comprehensive product data and integrated AR/VR for immersive comparisons.

STAMP Drone | Capstone Project Diploma | GitHub — January 2023 – May 2023
- Revitalized a drone control system using React and Flask that uses Tensorflow and Mediapipe for hand gesture recognition and Python with the YOLO algorithm for real-time object detection.

BLOGS AND COURSEWORK

Technical Writer on GeeksForGeeks and Medium — GeeksForGeeks Medium
- Authored technical blogs on AI, AWS, multimedia, and hybrid programming, covering Amazon SageMaker, ChatGPT clones, DynamoDB automation, text-to-speech systems, and Python-Dart cross-language development

Generative AI and Operational Security Coursework — Gen-AI Op-Sec
- Developed AI-driven and security-focused code for Generative AI and Operational Security coursework, implementing model fine-tuning, adversarial defense techniques, and secure AI deployment strategies

EXTRACURRICULAR ACTIVITIES

Responsible AI Fellowship | SimPPL funded by Mozilla — Project Details
- Applied knowledge graph driven representation learning with GraphRAG to generate enriched embeddings that integrate syntax, semantics, and structural properties of large scale software systems

Research Head at Association for Computing Machinery | DJSACM — Youtube
- Mentored 50+ students in research methodologies and technical writing; conducted 5+ workshops on research paper writing, publishing strategies, and core technical skills to enhance academic and professional development

Community Volunteer | Foss United Mumbai — Event Details
- Actively volunteered with FOSS United Mumbai, supporting the planning and execution of open-source technology meetups and conferences, including speaker coordination, and community engagement initiatives.

Open Source Developer | Hacktoberfest 2022, 2023, 2024 — Holopin
- Contributed to 15+ open-source projects, strengthening global developer communities; earned 3 Hacktoberfest completion badges for consistent, impactful contributions across diverse repositories and tech stacks.