

Raj

Full Stack Web Developer|AI/ML |Software Engineer
theraj714@gmail.com | 9931428818 | Punjab
GITHUB | LINKEDIN | PORTFOLIO

EDUCATION

LOVELY PROFESSIONAL UNIVERSITY
COMPUTER SCIENCE B.TECH CSE
CGPA: 7.5

August 2023 - August 2027
PUNJAB

EXPERIENCE

HEADSTATER AI | FULL STACK DEVELOPER

Remote USA | June 2024 – August 2024

- Developed and deployed AI solutions like a RAG-based b2b solution, Medical Image Processing AI, and various LLM models
- Utilized modern tech stacks: Pincone, RAG, Next.js, and TypeScript for building scalable, efficient systems
- Collaborated on AI-focused projects, enhancing functionalities and optimizing performance across applications.

GIRLSRIPT SUMMER OF CODE (GSSOC) | OPEN SOURCE CONTRIBUTOR
November 2024

Remote | October 2024 –

- Designed and implemented both **UI and code** for a **React component library**, enhancing user experience and functionality.
- Contributed to the open-source project **Dragonfly**, a Redis alternative, focusing on performance improvements.
- Developed a **crypto insights Telegram bot** for real-time cryptocurrency updates.
- Collaborated with diverse teams to drive project success and refine technical skills in an open-source environment.

SKILLS

PROGRAMMING LANGUAGES	C++, Python, React, Nextjs, javascript, typescript, C, Nodejs
TOOLS / PLATFORMS	Git, vscode, linux, github, gitlab, pinecone, Docker, Hugging Face Transformers, AWS (Amazon Web Services), Google Cloud Platform, Microsoft Azure
DATABASES	MongoDB, Sqlite, Redis

PROJECTS / OPEN-SOURCE

KRYO AI (LLM POWERED SEARCH ENGINE) | LINK
JavaScript,firebase,React,Nodejs

TypeScript, CSS, Nix,

- **Project Objective** : Developed an LLM-powered search engine to enhance information retrieval through natural language processing.
- **Problem Statement** : Improved upon traditional keyword-based searches by offering context-aware, conversational responses.
- **Features** :
 - Utilizes a fine-tuned LLM to understand user intent and deliver personalized results.
 - Provides detailed information, including source credibility and summaries for each result.
 - Implements user feedback for refining future recommendations.
- **Impact** : Enhanced user engagement and satisfaction by delivering relevant, context-rich responses that streamline the search experience.

- **Project Objective** : Developed an AI-driven solution integrated within a comprehensive medical platform to enhance diagnostic accuracy.
- **Problem Statement** : Addressed the challenges of inaccurate and time-consuming diagnoses from imaging data, including MRI scans, X-rays, and ECGs.
- **Impact** : Effectively impacted **500 users** with the final release, significantly improving diagnostic efficiency and overall patient care within the healthcare ecosystem.

- **Project Objective** : Developed an AI-powered book recommendation system integrated within a comprehensive platform to enhance user experience.
- **Problem Statement** : Addressed the challenge of discovering relevant books by providing personalized recommendations based on user preferences and reading history.
- **Features** :
 - Displays detailed information for each recommended book, including **cover image** , **author** , **ISBN** , and **plot summary** .
 - Provides insights into why specific books are recommended, highlighting their similarities to previously read titles.
 - Incorporates a user upvote system to refine recommendations based on community feedback.
- **Impact** : Successfully improved user engagement and satisfaction by delivering tailored book suggestions that align with individual interests and reading habits.

- **Project Objective** : Developed a multimodal AI system utilizing an open-source fine-tuned large language model (LLM) to enhance data processing and user interaction.
- **Problem Statement** : Addressed the limitations of traditional AI models by integrating multiple data types, such as text, images, and audio, to provide a more comprehensive understanding of user queries.
- **Capabilities** :
 - Processes and analyzes diverse inputs simultaneously, enabling richer context and more accurate outputs.
 - Generates detailed responses, including relevant information like images, summaries, and explanations based on user interactions.
 - Utilizes advanced algorithms for quick processing, ensuring fast response times even with complex queries.
- **Impact** : Successfully improved user engagement and satisfaction by delivering personalized and context-aware interactions that adapt to individual preferences and needs.

CERTIFICATIONS

- MongoDB logo MongoDB Developer's Toolkit: CRUD Mastery with Node.js, Java, Python, C# - **MONGODB**
- University of Minnesota logo Software Development Processes and Methodologies - **UNIVERSITY OF MINNESOTA**
- SQL (Advanced) Certificate - **HACKERRANK**
- J.P. Morgan Software Engineering Job Simulation - **FORAGE**
- Infosys Springboard Python - **INFOSYS**
- Computer Networking - **GOOGLE**
- Postman Api Student Expert - **POSTMAN**