Pearl Khatri

in linkedin.com/in/khatripearl/

github.com/pearlkhatri

Academic Education

Banasthali Vidyapith UniversityAug'21 – Aug'25BTech in Information Technology3.9 / 4.0 GPABanasthali Vidyapith UniversityAug'21 – Aug'23Diploma in French86.4%

Banasthali Vidyapith University

Advanced Diploma in Computer Networking

On-going

Aug'23 - Aug'24

Relevant Coursework

• Database Management

Computer Networking

Artificial Intelligence

Software Engineering

Data structures

Machine Learning

Operating System

OOPs

Web Technology

Internship

Summer Intern May'23 – Jun'23

Defence Research and Development Organization (DRDO), New Delhi

- Developed an intuitive university database GUI utilizing Java, NetBeans, and Swing for efficient information management.
- Designed modular code components for the GUI, enhancing maintainability and extensibility.
- Integrated PostgreSQL database with SQL for seamless data entry and retrieval, featuring a structured table forcomprehensive data overview.

Projects

Domain Adaptation in Large Language Models

- Developed a Chatbot using a pre-trained LLM model Gemma.
- Curated a comprehensive dataset from Banasthali Vidyapith's annual reports, meticulously organizing information on admission requirements, procedures, fees, and available courses to create a solid knowledge base for the chatbot.
- Finetuned the model using LoRA (low Rank Adaptation) technique and achieved an accuracy of 97%.

Liver Tumor Segmentation

- Implemented UNet architecture enhanced with selective attention and link skipping for liver tumor segmentation.
- Evaluated on LiTS dataset, achieving a Dice Similarity Coefficient of 0.89 and mean IOU of 0.76, outperforming FCN, UNet, UNet++, and SegNet models in accuracy and robustness.
- The project was published as it demonstrated capability to improve medical imaging applications through advanced segmentation techniques.

Movie Recommendation System

- Developed a Movie Recommendation System leveraging foundational Natural Language Processing concepts.
- Applied Term Frequency-Inverse Document Frequency Vectorizer (TfidfVectorizer) for feature engineering and employed cosine similarity for accurate movie recommendations.

Research Publications

Darshan Patil, Pearl Khatri, Dr. Gopal Sakarkar, Atharva Khedkar, Hong-Seng Gan and Muhammad Hanif Ramlee.
"Selective Attention UNet for Segmenting Liver Tumors." In 2023 International Conference on Cyber-physical Social Intelligence (ICCSI-23), pp. 1-6. IEEE, 2023.

Achievements

Ericsson Empowering Female Engineering Scholar

This scholarship is awarded to only 100 students all over India which includes a reward of Rs. 75,000/- towards the course fee.

GHC Scholar - 2023

• Recipient of a scholarship encompassing at the Grace Hopper Celebration (GHC'23) from 26th-29th Sep'23, one-year *premium AnitaB.org Membership Benefits*, to access networking, mentorship, academic and technical events.

ISET Scholar - 2022

• Awarded with a *Two-way flight tickets scholarship* (worth Rs. 20,000/-) to attend *ISET'22 (International Startup Enrichment Tour) in Singapore.*

Harvard WECode Scholar - 2023

• Awarded the WEAmplify Scholarship to attend the Harvard **WECode: Women Engineers Code Conference 2023**, organized by **Harvard University**.

Women Entrepreneurship Program

• Out of 500 students, selected for the training of 3 days in entrepreneurship and secured first position in the "Ideathon" organized by E-Cell, Banasthali Vidyapith on 20 Sep 2022.

Volunteering Experience

Beta Microsoft Learn Student Ambassador, Microsoft

Apr'22 - present

 Organized educational webinars, provided mentorship to peers, and guided prospective students through the application process, fostering skill development and community engagement.

Chapter Lead, GirlScript Hooghly

Feb'22 - Jan'23

• Led recruitment process, strategized & organized tech events, promoted Girlscript initiatives, and represented the organization at workshops.

Sergeant-At-Arms, Rotaract Club of Delhi Femina

Jan'22 - Sep'22

- Led impactful initiatives, including organizing competitions, webinars, and awareness campaigns, while actively participating in seminars and events focused on women's empowerment.
- Developed leadership, communication, and interpersonal skills by maintaining order, collaborating with club members, and engaging with guests.

Public Relations Manager, GirlUp Ahsaas

Mar'22 - Mar'23

• Initiated and led various campaigns and workshops addressing women's health, education, and financial literacy in marginalized communities.

Certification and Courses

Foundations of Project Management, issued by Google

• Established a strong understanding of project management, organizational culture, career development, strategic thinking, and project management methodologies.

AI for All, issued by INTEL

• This is a self-paced online learning course designed to raise public awareness about Artificial intelligence.

Dream Builder Course, issued by Arizona University

• Acquired comprehensive skills in business planning, market research, and entrepreneurship, culminating in the development of a personalized business plan for launching or expanding a business.

Language Proficiency

English
Full Professional Proficiency
Hindi
French
Limited Working proficiency

Extra-curricular Activities

Horse Riding Nov'22 – Mar'23

• Capable of riding a horse in walk and trot movements.

Hand Embroidery

Jan'23 - Feb'23

Capable of adding a decorative element to quilts, garments and accessories through hand embroidery.