

POOJA PANTHA

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SUMMARY

Motivated and detail-oriented IT graduate with strong academic grounding and hands-on experience through multiple internships. Skilled in software development, system design, and collaborative teamwork. Eager to pursue a PhD in Computer Science to contribute to cutting-edge research and innovation.

EDUCATION

BSc. Hons. Computing

The British College | Leeds Beckett University

Sep 2021 - Sep 2025

Graduated with First Class Honours

PROJECTS AND RESEARCH

Moksha: A Smart Mobile Application for Mental Health Support and Improvement

- Tools & Technologies: Flutter, Firebase (Authentication, Firestore, Storage), Dart
- Conducted in-depth research to identify user needs and evidence-based mental health practices.
- Built a mobile app integrating key wellness tools and evaluated usability through user feedback.

HudderHub Fresh: An E-Commerce Website

- Tools & Technologies: PHP, Oracle, SQL, HTML, CSS, JavaScript
- Collaborated on developing an e-commerce platform with separate admin, trader, and customer logins.
- Primarily responsible for designing and managing the Oracle database, including queries for user authentication and product management.

Image & Video Restoration and Enhancement

- Tools & Technologies: MATLAB, Image Processing Toolbox, Video Processing
- Performed detailed analysis and enhancement of blurred and degraded images and videos using MATLAB.
- Applied techniques such as Gaussian PSF modeling, Wiener deconvolution, histogram equalization, and aggressive sharpening.

BodyMetric: Cloud-Based Fitness Tracking Website

- Tools & Technologies: AWS, MS Azure, REST APIs, MongoDB, HTML, CSS, JavaScript
- Developed and deployed BodyMetric, a cloud-hosted fitness website offering tools like BMI calculator, distance tracker, and personalized workout plans.
- Authored a detailed report on cloud computing architecture, deployment models, and implementation strategies aligned with the developed system.

Command-Based Drawing Application

- Tools & Technologies: C#, Windows Forms, .NET Framework
- Developed a C# Windows Forms application with a command-based input system to draw shapes in real-time using commands.
- Implemented modular OOP design with multiple classes, interfaces, and XML documentation; included support for text-based graphics and future unit testing.

Concrete Compressive Strength Prediction using Machine Learning

- Tools & Technologies: R, Random Forest, Decision Tree, Linear Regression, KNN, Data Visualization
- Predicted concrete compressive strength using ML models (Random Forest, KNN, Decision Tree, Linear Regression) in R; identified Random Forest as the most accurate model.
- Interpreted model outputs to highlight key features (e.g., Age, Cement, Water) influencing strength, supporting practical concrete mix optimization.

LBU Care Foundation - Database Project

- Tools & Technologies: Oracle, SQL, PL/SQL, QSEE
 - Designed and developed a comprehensive database system to manage patient care, staff allocation, and treatment scheduling across multiple elderly care centers.
 - Utilized Oracle SQL Developer and PL/SQL to develop advanced queries, views, triggers, and stored procedures supporting dynamic treatment appointments, staff shift allocation, and benefits management (monthly vs hourly paid). The complete application enabled seamless data retrieval and reporting, enhancing hospital operational efficiency and scalability for future expansion.
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WORK EXPERIENCE

Admissions Counsellor Intern, The British College

May 2024 - Aug 2024

- Reviewed applications for accuracy prior to submission to the Admissions Committee.
- Provided counseling and guidance to prospective students on the admissions process.
- Collaborated with faculty members on curriculum development initiatives that would benefit prospective students.

Digital Marketing, IIDE

Jan 2024 - Feb 2024

- Produced engaging and informative blog posts optimized for search engines to enhance IIDE's online visibility and attract targeted audiences.
- Conducted in-depth research and analysis on various topics relevant to IIDE's industry and target audience.
- Monitored and analyzed discussions and trends on Quora related to areas of interest to IIDE.

Backend Networking, CG Net

Mar 2023 - Apr 2023

- Configuring and deploying network devices, ensuring proper segmentation and VLAN setups.
- Monitoring network performance, resolving issues, and performing maintenance tasks.
- Managing Quality of Service (QoS) to optimize network traffic.

Academic Evaluation Intern, Globalshala Education Pvt. Ltd.

Sep 2021 - Sep 2022

- Reviewed and assessed academic transcripts to ensure compliance with institutional and accreditation standards.
 - Collaborated with the academic evaluation team to support degree audits and credit transfer evaluations.
 - Utilized institutional software tools to track, update, and analyze academic data.
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ADDITIONAL INFORMATION

- **Technical Skills:** Python, SQL, R, MATLAB, Kotlin, Flutter, Cloud Computing, C, C++, C#, Linux, Java, JavaScript, CSS, HTML, PHP, Adobe Photoshop
- **Leadership:** House Captain in high school, leading peers in extracurricular activities to promote teamwork and school spirit, and awarded Best Captain of the Year for outstanding leadership.
- **Organization:** C.O.D.E. Club, Hult Prize at The British College, Career Quest, Job Fair 3.0
- **Languages:** English, Nepali, Hindi, French