# **Pradeep Bhatta**

Github & Website

## **Profile**

Aspiring computer vision scientist with a passion for coding, a strong analytical mindset, and entrepreneurial drive. Experienced in software development, machine learning, and leadership roles, aiming to create innovative tech solutions that address real-world challenges.

#### Education

## A-Level, Budhanilkantha School

2022 - 2024

Studied Physics, Chemistry, Mathematics, Computer Science and English Language

- Executive Member of Scout Club
- Editor and Content Manager of School Magazine

## Professional Experience

Research Intern, Kathmandu Institute of Applie Science 09/2024 - present

Developing machine learning models for drug quality prediction using Raman spectroscopy under Professor's guidance.

## Software Development Intern, Yarsa Tech

07/2024 - 09/2024

Contributed to software testing, debugging, and project management, improving system efficiency and reliability.

## SEO and Social Media Manager, Mushoor

07/2021 - 10/2021

Managed website and social media content, increasing web traffic by 50% and doubling engagement.

## Leadership and Organizations

## **Scout Club**

- Organized scout activities, orientations, and games for 300+ students.
- Managed Club's finance and brought sponsorhips.

## Maths and Science Technology Club

• Conducted a national math league, chess competitions, quizzes, cross-country math relays, and organized VR and planetarium sessions showcasing the universe for 1,200+ participants.

#### **Others**

- Led a sustainability initiative, reducing food waste by 3 tons/year and planting 350+ trees, positively impacting 1,500+ individuals.
- Organized cultural events such as the Annual Dance Competition and GauriShow.

## **Projects**

## **Nepali Character Classification Model**

Achieved 98.7% accuracy in classifying 46 Nepali characters using CNN trained on 92,000 images.

#### **Document Scanner**

Developed a computer vision project to scan and extract documents by removing the background.

#### Tic Tac Toe Game

Created multiplayer and AI versions using the Minimax algorithm and Pygame.

## Space Shooter game

Built an endless space shooter game using Pygame.

## **Pong Game**

Created an AI-powered single-player Pong game.

#### **Snake Game**

Developed the classic Snake game.

## Skills

**Programming:** Python, C, C++, Arduino, SQL, Git, Docker, Assembly Code.

Libraries: Pygame, NumPy, Pandas, Matplotlib, OpenCV, Torch etc

Web Development: HTML, CSS, JS.

Linux: OS, Shell scripting (Bash), ETL processes.

**Cybersecurity:** NIST frameworks, TCP/IP, Encryption and Risk management.

## **Courses And Certifications**

## Python For Everybody(I / II),

University of Michigan - Coursersa Mastered Python: syntax, control flow, data structures, OOP, regex, advanced algorithms.

## Google Cyber Security Professional Certificate(I / II), Google - Coursera

Learned cybersecurity tools, SQl, cyberattacks, ethics, Managing Risk and vulnerabilities, CISSP security domains, NIST Framework, SIEM and SOAR Tools.

## Hands on Introduction to Linux Command and **Shell Scripting**, *IBM* - Coursera

Built an automated system for encrypted password backup, reducing human error and improving security, and learning Bash scripting and Linux OS.

## AI Bootcamp - Learning Journey,

Kings College & Hackademia - Online Covered Python, Git/GitHub, Docker, machine learning, data analysis, NLP, computer vision, recommendation systems, and AI engineering.