Nabin Oli

k Kaggle | **in** LinkedIn | **◯** Github | **✉** nabinoli2004@gmail.com | **☎** 9848185797 |

Aspiring AI Researcher with a solid foundation in Python and experience in frameworks such as Django, Flask, and FastAPI. Skilled in API development and database management, seeking a Research internship.

Experience

Center for AI Research Nepal **Apr 2023 – Nov 2024**

Research Intern (Contract Based) *Remote*

- Built the **Heritage Graph platform** using **Django Rest Framework**, **DKAN-Drupal**, and **LinkML**, enabling AI-driven insights in cultural heritage research using Knowledge Graphs, Researched and reuse of ontology for NCHLOD
- Authored a Literature Review, Paper for NCHLOD project and co-wrote a Responsible AI Whitepaper under Dr. Tek Raj Chhetri and Dr. Semih Yamusak.

Datacamp X SSRC **Mar 2023 – Mar 2024**

Data Fellow and Community Moderator *Hybrid*

- Gained access to and completed a diverse range of DataCamp courses, enhancing expertise in data science, analytics, and visualization techniques.
- Successfully organized two bi-annual meetups for the Data Fellow community, fostering collaboration, knowledge sharing, and peer learning among members.

Education

Sunway College Kathmandu 2023 - May 2027(Expected)

BSc (Hons.) Data Science (Consistently Maintained First-Class Honours) *Kathmandu, Maitidevi*

- **Relevant Coursework:** Computer Programming with Python, OOP in Java, Database and Web Application Development, Data Structures and Algorithms (Python), Prob & Stat, Linear Algebra, Data Visualization with R

Capital College and Research Center (CCRC) 2020-2022

High School, Class 12 Biology and Mathematics) *Kathmandu, Koteshwor*

- **Grade:** 3.1 GPA

Projects

Heritage Graph: Nepal's Cultural Heritage Platform | *React, Django, LinkML, Oxiograph, KGs* | **[GitHub]**

- Developed a full-stack Platform for digitizing the Cultural heritages for NCHLOD project
- Researched and Reused the CIDOC-CRM ontology for KGs creation
- Created REST-APIs using the Django Rest framework
- Used Supabase for Authentication and Deploying the database

Realtime Multiplayer Chess Platform | *Next.js, Django Rest Framework, Flask, Redis* | **[GitHub]**

- Developed a full-stack, real-time multiplayer chess platform with **WebSockets** (FastAPI), **Redis**, and **JWT** for authentication.
- Built a custom chessboard UI using **HTML**, **CSS**, and **JavaScript**, integrated with robust chess logic.
- Managed API endpoints and database operations using **Django Rest Framework (DRF)**.
- Used **Redis** for game state caching and WebSocket synchronization.

Kalimati Project | *Python, Selenium, KaggleAPI, GitHub Workflows* | **[REST API GitHub Link]** & **[Dashboard GitHub Link]**

- Developed REST APIs for efficient data communication and integration.
- Built a web scraper using Selenium to automate data collection from Kalimati markets.
- Designed an interactive dashboard using Python Dash for data visualization.
- Performed data cleaning and preprocessing using Pandas for analysis.
- Implemented a complete data pipeline, from raw data to Kaggle datasets.

Python Package: pydplyr | *Python, Pandas* | **[GitHub Link]**

- Deployed version 0.1 Python package on PyPI with dplyr-like syntax for easy data cleaning allowing the users to download it with pip package manager.
- Integrated Pandas for extended functionality, with future features planned.
- Completed and published documentation.
- Performed thorough testing to ensure stability and functionality.

Additional Projects

Kaggle Datasets | [**Kaggle Link**].
- Kalimati Fruits and Vegetable Dataset updated daily.
- Animal Datasets Yolo Format.
- Members of Parliament Full Dataset Nepal.

Wild Watch | *Yolo, Flask, FastAPI, Django, Bootstrap* | [**Github Link**]
- Developed a wildlife detection system using YOLOv8 for real-time animal identification.
- Built with Flask for backend processing and React for frontend display.
- Won 3rd position as a team with this project
- Deployed system with camera setup and API for animal detection alerts.

Data Bank Nepal | *DKAN* | [**Github Link**]
- Developed the Data Bank Nepal WebApp using the DKAN Open Data sharing open-source solution for building data repositories.
- Developed and deployed the pydplyr Python package (pip install pydplyr), which mimics the dplyr package from R for simplified data cleaning and manipulation.
- Developed and deployed interactive dashboards for Kalimati Fruits and Vegetables to visualize pricing trends.

Flight Management System Using OOP in Java | *Java OOP, JUnit Testing, JavaDocs* | [**GitHub Link**]
- Scored highest marks in class for showcasing the use of software engineering principles and writing extremely modular code with well written comments and documentation.
- Developed a Flight Booking System in Java using OOP principles where customers to book flights and admins to manage bookings.
- Created an intuitive and user-friendly GUI with Java Swing, integrating dynamic form inputs and error handling.
- Documented the project with detailed JavaDocs and ensured code quality through rigorous JUnit testing.

Awards, Certifications, and Recognitions

Data Fellowship - 2023: Awarded a prestigious full-year scholarship to the DataCamp platform, enabling access to state-of-the-art learning resources in data science and analytics. [**LinkedIn post Link**]

Associate Data Scientist Certification: Successfully certified under the DataCamp Data Fellowship program, showcasing proficiency in data analysis, machine learning, and visualization techniques. [**Certificate**]

Kaggle Datasets Ranking: Secured a **global rank of 946 out of 15,470** in Kaggle's dataset rankings, earning the esteemed title of **Kaggle Dataset Expert** for contributions to the data science community. [**Profile**]

DataCrunch Hackathon 2024: Won **3rd place** in this prestigious nationwide competition organized by Code for Nepal, demonstrating exceptional teamwork and innovative problem-solving abilities. [**Details**]

Pearson Test of English (PTE): Achieved an impressive **overall score of 75 out of 90**, reflecting high proficiency in English language skills across speaking, listening, reading, and writing. [**Available on request**]

Technical Skills

Programming Languages: Python
Data Manipulation: NumPy, Pandas, dplyr
Data Visualization: Matplotlib, Seaborn, ggplot
Mathematics: Linear Algebra, Probability, Calculus, Statistics
Web Development: Basic familiarity with frontend development in JavaScript ,React and Next.js
Databases: SQL, MySQL, MongoDB
Backend Development: FastAPI, Flask, Django, Django Rest Framework
Machine Learning: Scikit-Learn, FastAI
Version Control: Git, GitHub

References

Dr. Tek Raj Chhetri: Postdoctoral Associate, McGovern Institute for Brain Research, MIT : tekraj@mit.edu
Rajan Adhikari: Solution Architect and Senior Lecturer at Sunway College: rajan.sunway@gmail.com
Kushal Regmi: Director, Sunway College : khushal@sunway.edu.np