

Sudip Parajuli

Full Stack Software Engineer

☎ (+977) 9811359372 | ✉ coc42060@gmail.com | 💻 sudipnext | 🌐 parajulisudip.com.np

Education

TU, Institute Of Engineering, Purwanchal Campus

B.E. in Electronics, Communication and Information Engineering

~ 05/2021 - 06/2025

Publications

Navigation of Mobile Robot with Nav2 and SLAM using LiDAR (accepted)

2025 4th International Conference on Sentiment Analysis and Deep Learning (ICSADL)

Experience

Data Fellow

codefornepal

2021-2025

- Programming & Data Analysis: Proficient in Python (pandas, NumPy, PyTorch), SQL (PostgreSQL, SQL Server, Snowflake), and Shell scripting.
- Data Science & Visualization: Strong foundation in data manipulation, exploratory data analysis, and visualization (Matplotlib, Seaborn).
- Machine Learning & Engineering: Experience with deep learning (PyTorch), data warehousing, containerization (Docker), and cloud computing concepts.
- Software Development: Knowledge of object-oriented programming, version control (Git), and writing efficient Python code.

Backend Engineer

Kinu Tech Pvt. Ltd

2024 Sept - Present

- Proficient in Basic AWS Services like EC2, Lambda, CDK, Beanstalk, Lightsail etc.
- Learned CI/CD techniques with GitHub Actions.
- Major Experience Working with technologies like Django, Django REST Framework, React, Next.js
- Worked on an international travel booking application. Created entire Django backend from scratch, implemented multiple APIs like Hotelbeds.
- Implemented Recommendation Systems using Gorse.
- Implemented Stripe for Payment Gateway
- Optimized application performance by implementing caching strategies and microservices, leveraging Celery for task queuing, AWS Lambda for scheduled tasks, and AWS CDK with ECR for efficient deployment which improved system performance by 3 times.
- Implemented Google OAuth2 along with robust login/signup platform.

University Lead, Instructor

CS50xNepal

Present

- Mentored 60 students to enter in the field of AI and ML, leading CS50 AI 2024/2025.
- Conducted and mentored at the national-level hackathon (X-Hack 3.0 – A CS50 AI Inspired Hackathon) with 100+ participants.
- Mentored students in topics like Python, Django, databases, and web scraping.
- Led the CS50x hackathon, mentoring teams on project execution.
- Organized mini-hackathons and technical workshops.

Advisor & Former Secretary

EXCESS

Present

- Taught more than 1500+ students on topics like Django, IoT, Microcontroller, Robotics, ROS2, Web Development etc.
- Led and organized **X-Hack 2.0**, a national-level hardware hackathon with 17 teams.
- Conducted workshops on IoT, brainstorming, and web development to prepare participants.
- Facilitated collaboration between students, alumni, and industry professionals.

- Worked on API integrations and backend optimizations.
- Built a Height Prediction model along with entire backend system of <https://www.heightcomparison.com>.
- Scraped thousands of websites to gather almost 50k celebs, anime data along with necessary information.
- Learned software engineering best practices through hands-on mentorship.
- Contributed to the development of a Pharmacy Dashboard in Nuxt3
- Contributed on django admin customization with custom themes and functionality.
- Worked with a variety of technologies, including Django, Django REST Framework, Django Admin Optimization, PostgreSQL, Nuxt.js, TypeScript, bs4, Selenium, MechanicalSoup, Scrapy, Jupyter Notebook, NumPy, Pandas, Large Data Handling, Data Cleaning, TailwindCSS, and others

Major Projects

URL Shortener with Complete Dashboard

- Developed a full-fledged URL shortener with analytics, user authentication (JWT), and a clean dashboard using ShadCN UI.
- Backend built with Django & Django REST Framework (DRF), ensuring secure and scalable API endpoints.
- Implemented user management, link tracking, and custom short URLs.

GNN Based Recommendation System (College Major Project)

- Built a full-stack recommendation system leveraging Milvus (vector database), HuggingFace, PyTorch, PyTorch Geometric, Django, Remix, PostgreSQL, and Graph Neural Network (GNNs) and variants like SAGEConv, GAT, GATv2 etc.
- Used Nginx, Gunicorn, and Whitenoise for efficient static file serving and API management.

All-in-One Video Downloader





- Created a robust platform supporting video downloads from multiple sources like YouTube, TikTok, Instagram with a user-friendly interface.
- Ensured efficient processing and seamless user experience with optimized backend services.

Multi Vendor E-commerce Dashboard for ByaparLink

- Built a complete e-commerce management system, enabling order tracking, product creation, and authentication.
- Integrated phone OTP verification for secure user access.
- Backend powered by Django & DRF, frontend using modern UI libraries for a smooth user experience.

Skills

Programming Languages:

 Python,  JavaScript /  TypeScript,  C++

Tools and Frameworks

Django, Django REST Framework, React, Next.js, ShadCN, Nuxt3, Remix, FastAPI, Pandas, NumPy, TailwindCSS, PyTorch, scikit-learn, PyTorch Geometric ~~LaTeX~~

DevOps & Cloud

AWS CDK, AWS Lambda, AWS EC2, AWS Lightsail, Docker, ECR, GitHub Actions

Web Scraping & Automation

Selenium, BeautifulSoup, Scrapy, MechanicalSoup

Other Tools & Technologies

PostgreSQL, Redis, Milvus, MongoDB, Stripe (Payment Gateway Integration)

Other Interests Beyond building projects, I am passionate writing technical blogs on <https://medium.com/@sudipnext>. My research interests includes Robotics, Deep Learning, Graph Neural Networks, and Recommendation Systems, with a focus on real-world scalable applications and optimization techniques.