SANDESH TAMANG

Faculty Lecturer and Freelance Software Developer

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GitHub: https://github.com/sixdgt

PERSONAL STATEMENT

To secure a lecturer position where I can leverage my 4+ years of teaching experience at DAV College and 5+ years as a freelance web developer to deliver engaging, industry-aligned instruction in Artificial Intelligence, Arduino Programming, Web Designing, and Cloud Computing. I aim to inspire first-semester students by blending foundational theoretical knowledge with hands-on applications, drawing on my expertise in the full software development lifecycle design, coding, debugging, testing, and maintenance. Dedicated to fostering an interactive learning environment, I utilize strong communication skills to simplify complex concepts, ensuring student success and practical skill development.

PROFESSIONAL EXPERIENCE

DAV COLLEGE, TU | DAV INTERNATIONAL COLLEGE, FWU | NIT, IGNOU

Faculty Lecturer – Full Time, June 2021 – Present

1. TU BCA

- ➤ Computer Fundamentals & Applications 1st Semester
- ➤ OOP in Java 3rd Semester
- > Scripting Language (PHP, HTML, JavaScript) 4th Semester
- Database Management System 4th Semester
- ➤ Advanced Java Programming 6th Semester

2. FWU CSIT

- > Information Technology Fundamentals 1st Semester
- ➤ Web Technology I 5th Semester
- > Java Programming I 6th Semester
- ➤ Advanced Java Programming 7th Semester

3. IGNOU BCS & BCA

- ➤ Computer Basics and PC Software 1st Semester
- ➤ Object Oriented Programming using Java 4th Semester

MINDRISERS CONSORTIUM PVT. LTD., KATHMANDU

Data Analyst - Full Time, July 2021 - June 2024

- 1. Collected, analyzed, and interpreted data to provide actionable insights for government, school, and union sectors.
- 2. Developed interactive dashboards and reports using Google Data Studio, Seaborn, and Matplotlib to support decision-making.
- 3. Collaborated with cross-functional teams to deliver data-driven solutions using Jupyter Notebook and Google Collab.
- 4. Applied statistical analysis techniques to enhance data quality and predictive modeling.

MINDRISERS CONSORTIUM PVT. LTD., KATHMANDU

Software Developer – Full Time, March 2020 – June 2021

- 1. Analyzed technical requirements to design project architecture and databases for timely deliveries.
- 2. Drove continuous integration and delivery through collaborative sprint cycles, automation testing, and iterative updates.
- 3. Documented and tested software applications to ensure functionality and reliability.
- 4. Worked with senior developers to implement design solutions and meet system requirements.

TUMMY TRUCK PVT. LTD., LALITPUR

Software Developer Intern – Full Time, April 2019 – February 2020

- 1. Learned new technologies and resolved minor bugs in existing projects.
- 2. Collaborated with senior developers to build and implement mini-projects for the company.

EDUCATION

Softwarica College of IT & E-Commerce, Dillibazar, Kathmandu

Affiliated to Coventry University, UK

M.Sc. (Hons) Data Science and Computational Intelligence, March 2022 – 2024

Softwarica College of IT & E-Commerce, Dillibazar, Kathmandu

Affiliated to University of Central Lancashire (UClan), UK

B.Sc. (Hons) Business Computing and Information System (L4DC and L5DC), NCC Education, 2015–2018

BISHNU MEMORIAL HIGHER SECONDARY SCHOOL, Dharan, Sunsari

High School, Physical Science, HSEB Board, 2012–2014

NAVODAYA VIDHYA MANDIR HIGHER SECONDARY SCHOOL, Dharan, Sunsari

SLC, Education Board of Nepal, 2011

TECHNICAL SKILLS

- Programming Languages: Python (Django, NumPy, Pandas), Java (OOP, Advanced), JavaScript, PHP, SQL
- Artificial Intelligence & Machine Learning: Supervised Learning, Predictive Modeling,
 Data Preprocessing
- Arduino Programming: Arduino IDE, Sensor Integration, Basic IoT Applications
- Web Designing/Development: HTML, CSS, JavaScript, Django, ReactJS, Bootstrap, Tailwind CSS
- Cloud Computing: AWS (EC2, S3 basics), Heroku Deployment, Serverless Computing
- Database Management: MySQL, PostgreSQL, MongoDB
- Data Analysis & Visualization: Matplotlib, Seaborn, Google Data Studio, Jupyter Notebook
- **Software Development**: Agile Methodologies, Test-Driven Development (TDD), CI/CD, REST APIs
- Design & Editing Tools: Adobe Photoshop, Adobe XD, Adobe Illustrator, Figma
- Other Tools: Git, Jira, Scrum, Adobe Premiere Pro

RECENT PROJECTS

1. Loan Default Prediction Model for Banking Sector

- Tools Used: Jupyter Notebook, Google Colab, NumPy, Pandas, Scikit-Learn, Seaborn, Matplotlib, Google Drive
- **Description**: Developed a machine learning model to predict loan defaults, enhancing banking decision-making.

• Key Contributions:

- Preprocessed datasets using Pandas and NumPy for high-quality modeling input.
- Built predictive models with Logistic Regression and Decision Trees via Scikit-Learn, achieving X% accuracy.
- Visualized data and model performance using Seaborn and Matplotlib for clear insights.
- Deployed development environment on Google Colab with data stored on Google Drive.

2. Employee Management System

- Tools Used: Python, Django, HTML, CSS, JavaScript, MySQL
- **Description**: Designed a web-based system to manage student employee records and schedules as a class project.

• Key Contributions:

- Developed back-end with Django for user authentication and data management.
- Created responsive front-end using HTML, CSS, and JavaScript for accessibility.
- Integrated MySQL database for efficient storage and retrieval of employee data.

3. Mini Learning Management System

- Tools Used: Python, Django, HTML, CSS, JavaScript, SQLite
- **Description**: Built a lightweight LMS for course content delivery and student progress tracking as a class project.
- Key Contributions:
 - Implemented course management and quiz functionalities using Django.
 - Designed user-friendly interface with HTML, CSS, and JavaScript.
 - Used SQLite for lightweight database operations, suitable for educational demos.

4. Student Management System

- Tools Used: Python, Django, HTML, CSS, JavaScript, PostgreSQL
- **Description**: Created a system to manage student records, attendance, and grades as a class project.
- Key Contributions:
 - Built back-end with Django for secure data handling and user roles.
 - Developed front-end with HTML, CSS, and JavaScript for intuitive navigation.
 - Integrated PostgreSQL for robust data storage and querying.

5. Arduino LED Traffic Light Simulator

- Tools Used: Arduino Uno, Arduino IDE, Breadboard, LEDs, Resistors
- Description: Designed a traffic light simulation using LEDs with timed sequences for IoT education.
- Key Contributions:
 - Programmed Arduino to control LED sequences, simulating real-world traffic systems.
 - Integrated basic electronics for hands-on learning, suitable for beginners.
 - Demonstrated IoT concepts for classroom teaching.

OTHER PROJECTS

- 1. GurkhasInn Restaurant Order Management System https://gurkhasinn.co.uk/
- 2. **Digital Palika Government Project** https://digitalpalika.org/index.html
- 3. Unicome Nepal Union of Commerce Employees https://unicomenepal.org/
- 4. **Ez Vidya School App School Management Application** https://play.google.com/store/apps/developer?id=EZ+Vidya+Pvt.+Ltd.

DECLARATION

I hereby declare that the details and information given are complete and true to the best of my knowledge.

REFERENCES

Prashanna Chudal

Managing Director

MindRisers Consortium Pvt. Ltd., Kathmandu

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Sudip Adhikari

Head of Department, BCA & BSc CSIT

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Contact: +977-9851163452

NEXT OF KIN

Father: Mangal Singh Tamang Email: <u>imangal4u@gmail.com</u>

Contact: +977-9842054819, +977-9825304878 **Institution**: Shree Amar Primary School, Dharan