

Sudip Tiwari Bishwakarma / सुदिप तिवारी विश्वकर्मा

Narayantar, Kathmandu | +977 9813077307

[SudipBishwakarma.github.io](https://github.com/SudipBishwakarma) | sudip.k3@gmail.com

EDUCATION

London Metropolitan University. Islington College, Nepal

Apr 2019 – Dec 2021

M.S. in Information Technology

Classification: Pass with Distinction, 77.22%

Thesis: [Using Machine Learning in Stock Prediction and Quantitative Trading: A Context in Nepal](#)

Supervisors: Rohit Panday, Dr. Gajendra Sharma

Project: *Designing Data Warehouse for Analytics*

Designed a Star schema and implemented a data warehouse capable of ingesting data from relational tables, performing transformations and loading to dimension and fact tables.

Supervisor: Mukesh Sah

London Metropolitan University. Islington College, Nepal

Jan 2014 – Nov 2015

B.S. in Computing

Classification: Lower Second Class Honours, 56%

Project: *What's That?*

Developed an augmented reality Android app capable of recognizing images and overlaying interactive content when a user hovered their cellphone over the image.

Supervisor: Abhinav Dahal

Informatics Academy. Islington College, Nepal

Dec 2010 – Sep 2012

Diploma

Year 2: International Advanced Diploma in Digital Media Technology

Courses: Software Engineering, Computer Architecture & Data Communication, Information Management, Discrete Mathematics, Networks and the Internet, Sound Design for Interactive Media, Film and Video Production, Digital Media Effects

Year 1: International Diploma in Information Technology & Communication

Courses: Computer & Information Processing, Object Oriented Analysis & Design, Database Design and Management, Mathematics for Computing, Essential of Networking and Network Security, Introduction to Java, C Programming, Web Pub & HTML

CGPA: 3.13

WORK EXPERIENCE

Principal Software Engineer, Infinite Software Services Nepal

Feb 2024 – Present

(Infinite acquired Cotiviti Nepal)

- Scoped client deliverables and led the system design, architecture and development of MDM solution for Cotiviti, managing two high-performing teams.
- Facilitated best practices following organizations core values employing code reviews, versioning, reusability and maintainability.

Principal Software Engineer, Cotiviti Nepal

Feb 2020 – Feb 2024

- Led the enterprise architecture design and development of Master Data Management solution and data organization to ingest and master US healthcare data from disparate sources, incorporating event-driven serverless model, making the process real time and auto-scalable.

- Proposed and implemented a modular approach in developing data pipelines with focus on reusability and query optimization which in turn reduced execution time by 45% thereby improving client SLA.
- Mentored and evaluated interns, and led a yearly program to teach trainee batches the basics of Python programming and Bash scripting.

AI Developer, Ramailo Technologies

Feb 2023 – Nov 2023

Part-time consulting

- Conducted research and development to evaluate LLMs truthfulness to identify whether the model response abides with the provided context.
- Led the research, design, and foundational development for the preliminary phase of a learning management chatbot project employing retrieval augmented generation and OpenAI's large language model.
- Successfully fulfilled the commitments for the first phase of the application which played a pivotal role in securing the startup's contract with the client.

Technical Consultant, GadgetByte Nepal

Sep 2018 – Mar 2021

Part-time consulting

- Effectively managed the entire IT infrastructure, encompassing tasks such as resource monitoring, log analysis, web application management and scheduled backups. This comprehensive approach ensured seamless online business operations.
- Developed a feature integrating affiliate marketing service from a major eCommerce retailer, making the business the first ever in Nepal to adopt this approach.

Software Engineer, Pebble Infotech

Feb 2016 – Jan 2020

- Developed custom applications to manage inventory for Shopify-powered stores.
- Identified and fixed a severe vulnerability in Magento eCommerce store, thereby alleviating security efforts in preventing future attacks.
- Solely managed the cloud infrastructure and deployment process of web applications.

Music Arranger/Recordist, Karma Records

Nov 2013 – Jan 2015

- Arranged original music for artists, fostering creativity through continuous feedback.
- Led a team of musicians for a diverse concert project, seamlessly blending classic and pop elements.
- Innovated studio operations by researching and implementing optimal gear, while mentoring cover artists in music theory and artistic exploration.

TEACHING EXPERIENCE

External Supervisor, Islington College, Nepal

Sep 2020 - Present

Module: Final Year Project

- Mentored final-year undergraduate students guiding through the entire project development and documentation process, from inception to completion following continuous feedback.
- Assessed and graded students work based on the overall progress of the project development process.

Associate Lecturer, Herald College, Nepal

Jan 2021 – Jul 2021

Module: Big Data

- Delivered comprehensive lectures on Big Data to final-year B.S. students.
- Tailored and refined course materials making it relevant to the IT industry in Nepal.
- Conducted interactive workshops to give students hands-on experience by engaging them and addressing their confusions.
- Assessed and evaluated students' performance through meticulous grading of the coursework.

RESEARCH EXPERIENCE

Automated Hyperparameter Optimization in Machine Learning for Stock Prediction

Jul 2022

2022 Second International Conference on Next Generation Intelligent Systems (ICNGIS)

Sudip Tiwari Bishwakarma, Gajendra Sharma

[IEEEExplore](#)

Product R&D: Innovation Lab, Cotiviti Nepal

2022 – 2024

Member of the Central Committee

Led the research and development efforts of addressing issues related to cross-department collaboration, transition of ideas from hackathon to production and hosting bi-weekly tech talk.

AWARDS

Best paper awards

Jul 2022

2022 Second International Conference on Next Generation Intelligent Systems (ICNGIS) – INR 2,500

INVITED TALKS AND WORKSHOP

Data Warehousing and Big Data

Aug 2022

IIMS College, Nepal

Designed and facilitated a 6hr intensive workshop for M.S. students which involved in creating a local Hadoop cluster followed by hands-on exercises in manipulating data using MapReduce and Spark. [Workshop Materials](#)

Designing Data Ingestion Pipeline for Healthcare Analytics

Feb 2022

techWebinarNepal Series 40

Presented in an online webinar sharing my expertise in Big Data. [My Talk](#), [Q&A session](#)

VOLUNTEER EXPERIENCE

Technology Consultant, Society for Helpless Children

Mar 2019 – Jan 2020

Society for Helpless Children is a non-profit organization with the sole purpose of helping and empowering orphans and underprivileged children. I was fortunate enough to contribute my expertise by providing guidance and alleviating friction through the effective use of technology in their day-to-day operations.

SKILLS

Programming Languages

Python, Bash, PowerShell, Node.js, PHP

Frameworks & DBMS

TensorFlow, Django, Flask, Express.js, FastAPI, MySQL, Oracle, PostgreSQL, MongoDB, Redis

Technologies

AWS, Azure, Cloudera Hadoop, Kafka, Spark, Splunk, Kubernetes, Docker

Audio Technologies

Pro Tools, Finale, Guitar Pro

CERTIFICATIONS

Audio Signal Processing for Music Applications – Coursera	Nov 2024
Reinforcement Learning From Human Feedback – DeepLearning.AI	Mar 2024
Mindshift: Break Through Obstacles to Learning and Discover Your Hidden Potential – Coursera	Jan 2021
Structuring Machine Learning Projects – Coursera	Dec 2020
Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization – Coursera	Oct 2020
Neural Networks and Deep Learning – Coursera	Aug 2019
Splunk Certified User – Splunk	Aug 2017
Learn to Program: The Fundamentals – Coursera	Jan 2014
Professional Training: PHP/MySQL – Broadway Infosys Nepal	Jun 2010

REFERENCES

Available on request