

Shashi Gharti, MSc

Software developer

<https://github.com/shashigharti>

Kathmandu, Nepal

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EDUCATION

- **Computational Neuroscience, Neuromatch Academy**([NMA](#)), 2024
- **Virtual Summer School, Climate Change AI**([CCAI](#)), 2024
- **Oxford Machine Learning Summer Course**([OxML](#)), 2021
- **Applied Data Science Module(Fellowship)**, WorldQuant University([WQU](#)), 2019
- **MSc. in Computer Science, Asian Institute of Technology (AIT)**, Thailand, 2010
 - ◆ Thesis: “Multiple Person Tracking and Left Luggage Detection using Appearance Models” under the supervision of **Dr. Matthew Dailey**([link](#)).
- **Bachelor of Computer Applications (BCA), LA Grandee International College (Former Pokhara College of Technology [[PCT](#)])**, 2004.

AWARDS / PRESENTATIONS/ CERTIFICATIONS

- **Wikimania Presentation**, Data use and reuse: Unlocking the Potential of Frictionless Data for Wikidata, 2023
- **Computer Vision**, Udacity Scholarship, 2020
- **Runner up, Master's Thesis Competition in Informatics and Communications Technologies**, Asian Institute of Technology (AIT), 2010
- **Scholarship (50%), Masters**, Asian Institute of Technology, 2010
- **Gold Medal, Aishwarya Vidya Padak (2004), National Award** for achieving the highest score among female candidates (Bachelor in Computer Applications), 2005
- **Scholarship (50% merit-based), Bachelor's degree**, LA Grandee International College, (Former Pokhara College of Technology [[PCT](#)]), 2001 - 2004

TEACHING EXPERIENCE

Instructor, Tribhuvan University, Academia International College (Part-time) - 2011 - 2014 - Kathmandu, Nepal

- Taught various programming courses(PHP, Web development, and Operating System) to undergraduate **computer science students pursuing BSc degree**.

Instructor, Tribhuvan University, Department of Computer Science (Part-time) - 2015 - Kathmandu, Nepal

- Taught **Java Basics and Java Enterprise Edition** to **MSc Computer Science students** for two semesters.

PERSONAL PROJECTS/ OPEN SOURCE CONTRIBUTIONS (Volunteer)

- **Neuromatch Academy, Online, 2024** ([link](#))
 - ◆ Decoding Cortical Activations: A Multi-Feature Approach
- **Privacy Preserving Browser, Chrome Extension, 2021 - 2023** ([link](#), [github](#))
- **Omdena, Lead Machine Learning Engineer, Volunteer, 2021 - 2022**
 - ◆ Breast Cancer Detection (Ultrasound Images, [link](#)),
 - ◆ Fall ArmyWorms damage assessment (MRCNN, UNET).
- **X-pi, Low cost solution to detect chest pathologies** deployed to **Raspberry Pi, 2019** ([link](#))
- **Gene Expression Analysis, Nanostring Competition (Honorable Mention), 2021** ([link](#))
- Contributed **mozilla/PRESC, Open Source, 2020** ([link](#))
- Contributed in developing a 5 minute video for a research paper, **Participant at Stanford Scholar Initiative, 2017** ([link](#))

PAPERS

Co-author, **“Automatic Suspicious Behavior Detection from a Small Bootstrap Set”**, VISAPP, 2012

Co-author, **“Incremental Behavior Modeling and Suspicious Activity Detection”**, Pattern Recognition, 2013

WORK EXPERIENCE

Data Scientist(Contract, Remote), [Aileen Health](#) - June/2024 - Contd. - Austria

- Transformed and cleaned various datasets for model training.
- Built a pipeline to streamline the processing, transformation of the data.
- Conducted EDA to identify trends, anomalies, and insights about the data.
- Researched various state-of-art techniques to improve early detection of breast cancer signs.

Software Developer(Contract, Remote), [Open Knowledge Foundation](#)(OKFN) - April/2022 - October/2023. - Cambridge, UK

- Developed and maintained features for **open-data** libraries/softwares ([frictionless-py](#), [frictionless-ci](#), [ckan](#) and others).
- Part of a team to develop an open-source **web-based UI** ([OpenDataEditor](#)) for the **frictionless-py** library, improving user accessibility.
- Delivered **presentations** at Community meetings and provided **community support** for open-source softwares.

Team Lead/Software Developer, [Robust IT Concepts Pvt. Ltd.](#) - Feb/2018 - March/2022. - Kathmandu, Nepal

- Architected and developed diverse web applications such as **Dynamic data collection and reporting tools**, the **E-commerce platform "Reddoko,"** and a versatile **Content Management System (CMS), Mobile applications** and more successfully.
- Actively engaged in **ongoing research and development efforts**, consistently adopting new technologies to enrich and expand the existing system's features.
- Interact with clients to gather requirements and provide support.
- Contributed to development of **AI & ML projects(POC)** including a **chatbot** and **disease diagnosis** systems.
- Mentored and trained junior team members.

SA/Developer, [Element7Digital Pty Ltd.](#) - Aug/2015 - Jan/2017 - Geelong, Australia

- **Enhanced** code quality and stability by refactoring and re-architecting the legacy PHP/Laravel/Javascript codebase, resulting in fewer bugs.
- **Led** a team to develop various e-commerce applications.
- **Led** research and development initiatives to seamlessly integrate new features into **e-commerce applications**.
- Mentored and trained junior team members.

Software Engineer/Team Lead, [Integrated Solutions\(MNC\).](#) - Aug/2011 - December/2014 - Kathmandu, Nepal

- Collaborated with the deployment team to implement the **Electronic Cheque Clearing System (ECC)** for Nepal Rastra Bank (NRB), effectively replacing the manual cheque-clearing system.
- Conducted **Training of Trainers (TOT)** sessions to educate member banks on the ECC system.
- Produced comprehensive technical documentation for HRemit, a Remittance system, utilized by **Himalayan Bank Limited (HBL)**.
- Part of the team in the successful deployment of nswitch, a **Credit Card processing software**, at Himalayan Bank Limited (HBL), strategically replacing legacy software to accommodate American Express services.
- **Mentored and trained** junior team members.

Senior/Software Developer, [Sustainable Solutions](#)(MNC) - April/2005 - July/2011,
Nepal

- Developed a web-based interface for the **mSupply** software, leveraging Javascript and the **EXTjs** library (2010-2011).
- Led the development efforts for a web-based **Human Resource Management System for INF**(International Nepal Fellowship), utilizing Flex and PHP for the frontend and MySQL for the backend (2008).
- Worked as a senior developer for **Gorkha Recruitment System (GRS)** for **British Gurkha Camp** using 4th dimension (2005).
- Conducted field visits to gather requirements and to provide client support.
- Mentor junior team members.

TECHNICAL SKILLS

Python, Django, Flask, FastAPI, SQLAlchemy, QGIS, Geospatial data processing, GDAL, PostGIS, Mapbox, Leaflet, SNAP, JavaScript, React.js, TypeScript, Vue.js, GIT, Machine Learning, Computer Vision, OpenCV, Pytorch, API Integration, HTML5/CSS, Node.js, Linux, C/C++(basic), Java(Intermediate), DevOps, Kubernetes , Docker, AWS, MySQL, PostgreSQL, LAMP/LEMP stack administration, pytest, PHPUnit, PHP, Laravel.