

SHAURAV KHADKA

APPLIED AI & DATA | DIGITAL SYSTEMS | TECHNOLOGY LEADERSHIP

Darwin, NT focus (relocating from Sydney) | +61 416 989 794 | khadka.shaurav@gmail.com

[Portfolio](#) | [LinkedIn](#) | [GitHub](#) | [ORCID](#)

Relocating to Darwin, NT | Available for interviews now | AI, data, research and digital-systems opportunities

PROFESSIONAL PROFILE

Applied AI and digital-systems professional with production-oriented AI/ML R&D, more than three years of CTO-level technology leadership and a Master of Information Technology (Artificial Intelligence). Experience spans production document AI, fraud-detection evaluation, NLP/RAG, data workflows, APIs, GIS, software delivery and technical governance. Known for turning ambiguous technical problems into testable workflows, reliable systems and decision-ready recommendations. Doctoral Researcher at Charles Darwin University in responsible Generative AI, with a professional focus on Darwin-based AI, data, research and digital-systems work.

SELECTED IMPACT

3+ years as Chief Technology Officer, owning technology strategy, software systems, APIs, databases, GIS/mapping, operational workflows and digital improvement for an export-logistics business.

Completed a 13-week industry AI/ML R&D major project at Truith on production document-AI reliability and adversarial fraud-detection evaluation; awarded 83/100 (Distinction).

Built repeatable evaluation workflows across OCR, field extraction, validation, confidence review, transformation testing, regression analysis and human-review boundaries using Python, pandas, AWS S3/boto3 and Azure Document Intelligence.

Applied AI portfolio spans semantic retrieval/RAG, computer vision + ROS2, temporal graph ML and reinforcement learning, with quantified evaluation results and public technical documentation.

CORE EXPERTISE

AI / ML: Python, PyTorch, TensorFlow, scikit-learn, Hugging Face, Sentence Transformers, FAISS, RAG, NLP, computer vision, reinforcement learning

Data / Engineering: SQL, pandas, NumPy, AWS S3/boto3, Azure Document Intelligence, JSON, REST/SOAP APIs, MySQL, Oracle, Git, Docker, Linux, ROS2

Research / Evaluation: experiment design, benchmarking, system/model evaluation, error analysis, traceability, reproducibility, regression testing, failure-mode analysis

Leadership / Delivery: technology strategy, systems implementation, stakeholder coordination, SOPs, operational workflows, reporting, automation, GIS/mapping

PROFESSIONAL EXPERIENCE

AI/ML Research and Development Intern | [Truith](#) | Feb 2026 – Jun 2026

Sydney, NSW | Hybrid | Production document intelligence and fraud-detection evaluation

Built repeatable evaluation workflows across document ingestion, OCR configuration, confidence analysis, field mapping, transformations, validation, reruns and structured error review using Python, pandas, AWS S3/boto3, Azure Document Intelligence and JSON.

Supported adversarial fraud-detection evaluation through annotation review, detector-output analysis, edge-case testing and interpretation of false-accept / false-reject trade-offs.

Examined reliability beyond headline accuracy, including traceability, reproducibility, validation dependencies, regression risk, latency/cost implications and the boundary between automation and human review.

Produced structured technical findings and recommendations for evidence-informed improvement of production AI workflows.

Chief Technology Officer | [Picpoint Nepal Pvt. Ltd.](#) | Jun 2021 – Jun 2024

Kathmandu, Nepal | Hybrid | Technology strategy, software systems and digital operations

Led technology strategy and continuous improvement across web platforms, databases, APIs, GIS/mapping inputs, data flows and operational workflows, aligning technical priorities with commercial and operational needs.

Directed planning and implementation of digital workflows for export logistics, customer management and business operations; translated organisational requirements into roadmaps, SOPs and implementable systems.

Coordinated technical and non-technical stakeholders, managed competing priorities and supported technology adoption in a resource-constrained environment.

Evaluated automation and emerging-technology opportunities and communicated decision-ready recommendations to management.

Junior Full Stack Developer | [Thakur International](#) | Jun 2019 – May 2020

Kathmandu, Nepal | On-site | Web and mobile application development

Developed and maintained web/mobile components using PHP, Python and JavaScript; integrated REST/SOAP APIs, OAuth authentication and Google Maps/geolocation workflows.

Contributed to debugging, refactoring, performance analysis and agile sprint delivery.

SELECTED TECHNICAL PROJECTS

RedditPulse – Semantic Retrieval & Grounded Insight Platform

NLP | Sentence Transformers | FAISS | RAG | Streamlit

Co-developed a seven-module NLP/LLM prototype over 1,989 filtered posts and 1,588 comments from 10 subreddits, integrating preprocessing, sentiment analysis, topic detection, semantic retrieval and grounded insights.

Evaluated 384-dimensional embedding retrieval with FAISS, achieving Precision@5 = 0.68 and Recall@5 = 0.68 under the executed evaluation.

Fine-Grained Computer Vision & ROS2 Robot Deployment

ResNet50 | Transfer learning | ROS2 | Sim2Real

Contributed to an end-to-end vision-to-action pipeline; team-level robot-image accuracy recovered from 2.38% to 95.24% after deployment-specific data collection, augmentation and fine-tuning.

Mapped predicted classes to ROS2 navigation commands and documented deployment-shift and evaluation limitations.

Temporal GNN for Blockchain Fraud Detection

PyTorch | NetworkX | Temporal graph modelling | XGBoost

Modelled blockchain transactions as dynamic graphs and built a temporal graph-learning pipeline using temporal encodings, attention-based message passing and benchmark comparison with XGBoost.

EDUCATION & RESEARCH

Master of Information Technology (Artificial Intelligence) | Macquarie University | Qualified 8 Jul 2026

Sydney, NSW

Industry AI/ML R&D major project at Truuth: 83/100 (Distinction).

Relevant study: Advanced Machine Learning; AI for Text and Vision; Data Science; AI Ethics and Law; Automated Decision Making;

Knowledge, Planning and Decision Making under Uncertainty; Advanced Topics in AI.

Doctor of Philosophy (PhD) | Charles Darwin University | 2026 - Present

Casuarina Campus, Darwin, NT | Responsible Generative AI research

Research: Standards-Aligned Technical Reference Framework for Responsible Generative AI in Teacher Education, supervised by Jon Mason; focus includes risk controls, human oversight, privacy/data governance, transparency and AI literacy.

Bachelor of Science (Computing) with First Class Honours | London Metropolitan University / Islington College | Awarded

Mar 2021

Kathmandu, Nepal

Final-year applied software-engineering project: integrated trip-planning and travel-experience platform using PHP/Laravel, MySQL, HTML/CSS and JavaScript.

RESEARCH & PROFESSIONAL DEVELOPMENT

Four public DOI-backed Zenodo technical reports/preprints covering OCR reliability, multilingual semantic retrieval, reinforcement learning and retrieval-augmented generation; publication status accurately identified as non-peer-reviewed.

Artificial Intelligence (AI) Education for Teachers – Macquarie University + IBM / Coursera, completed 15 Aug 2026.

University Teaching – The University of Hong Kong / Coursera, in progress (Aug 2026); Ethics and Governance of Artificial Intelligence for Health – World Health Organization, completed 2023.

CS50x: Introduction to Computer Science – Harvard University; Design Thinking – Macquarie University Incubator × KPMG; UPG Sustainability Leader – Certified with Distinction.

LEADERSHIP & COMMUNITY

Volunteer administrator of Macquarie University student-led AI communities since 2024, supporting high-volume peer communication, resource sharing and academic/technical information exchange.

Additional leadership development includes Macquarie University's Postgraduate Global Leadership Program and the Aspire Leaders Program.

PROFESSIONAL LINKS

shauravkhadka.com.np | [LinkedIn](#) | [GitHub](#) | [ORCID 0009-0009-9874-8239](#)