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Publication

AI-Driven Healthcare: A Review on Ensuring Fairness and Mitigating Bias

Sribala Vidyadhari Chinta, Zichong Wang, Avash Palikhe, Xingyu Zhang, Ayesha Kashif, Monique Antoinette Smith, Jun Liu, Wenbin Zhang

PLOS digital health, 2025

[view paper](#)

Education

Knight Foundation School of Computing and Information Sciences, Florida International University

Miami, Florida

Ph.D. in Computer Science (2025 - present)

Research area: My current research focuses on detecting and analyzing potential biases in machine learning algorithms, with an emphasis on mitigation strategies to address fairness concerns.

Kathmandu Engineering College, Tribhuvan University

Kathmandu, Nepal

Bachelor's in Computer Engineering (2018 - 2022)

Discipline studied: Software Engineering, Electrical Engineering, Artificial Intelligence, Microprocessors, Distributed Systems, Computer Networks, Thermodynamics, Electromagnetics, Embedded Systems.

Projects:

- Developed a machine learning project titled "Sales Analysis and Prediction" utilizing models such as Random Forest, XGBoost, and Lasso Regression.
- Created an android application with features including appointment booking, health news feeds, and hospital location tracking.

Budhanilkantha School

Kathmandu, Nepal

High School, Science Major (2016 - 2017)

Discipline studied: Computer science, Physics, Chemistry, Calculus, Geometry, Algebra, English.

Professional Experiences**Nepal Clearing House Limited (NCHL)**

Kathmandu, Nepal

Android Engineer (11/2023 - 3/2025)

- Developed interbank payment solutions, enabling bank account integration for payment processing and fund transfers.
- Worked on mobile applications using native Android architectures and Flutter framework.
- Developed a secure account enrollment prototype using Google's Gemini AI and Machine learning kit for user photo validation.
- Implementation of NFC and EMV-compliant QR codes, enabling secure and contactless transactions.

Ayata Incorporation

Kathmandu, Nepal

Intern Software Developer (11/2022 - 03/2023)

- Developed applications using Android architecture and components.
- Worked with Kotlin, XML UI designs, Room, Retrofit, Shared Preferences, Rest Apis.
- Implemented coroutines, dependency injections and local databases.

Leapfrog Technology

Kathmandu, Nepal

Student Partner (12/2021 - 08/2022)

- Developed a project using React JS and Django.
 - Trained in UI/UX designs, project management, Web technologies and Software Engineering.
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Project Experiences

Face detection app using Gemini (2025)

- Built a User Photo Validation App with Google's Gemini AI Model
- Ensures that uploaded photos meet specific criteria, such as clear visibility of facial features and the absence of obstructions.

Connect-IPS (Interbank Payment System) (2024)

- Developed a unified payment platform enabling customers to link bank accounts for payments, fund transfers, and creditor payments.
- Focused on Android architecture, tokenization, encryption, cryptography, and authentication.

Nepal Pay Business App (2024)

- Built a Flutter-based app for merchants to accept payments from various channels, manage transactions, and track sales.
- Implemented with Dart, BLOC pattern, Firebase, and encryption.

E-Health Application (2022)

- Created an Android app for health checkup appointments using Firebase, Google Maps APIs, Room, SQLite, Retrofit, and RESTful APIs.
- Integrated authentication and material design principles.

Voluntary Experience

Rotary International

Rotaract club of Kathmandu West

Vice-President (06/2024-present)

Secretary (06/2023-07/2024)

Professional Service Director (06/2022-07/2023)

- Leadership and Management: Facilitated various professional development workshops, including public speaking, entrepreneurship, crisis communication, event management, and Model United Nations.
- Community Outreach: Organized and executed community service projects focused on clothing donations, sustainable initiatives (banner-to-bag), support for old age homes, menstrual hygiene, and water and sanitation improvement.
- Event Coordination: Managed the planning and execution of multiple events, ensuring successful community engagement and resource allocation.

Dot Net Club

Budhanilkantha School

Vice-President (2017)

- Organized and participated in various technological events related to software engineering, Programming and games.

Language:

Nepali: Mother tongue

English: fluent

Hindi: fluent
