# Gobinda Pandey

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• Rochester, NY, USA

in gobinda-pandey

#### Research Interests

Network Security, IoT Security, Machine Learning, Embedded Systems Security, Vulnerability Detection, Side-Channel Analysis, Cryptography, Data Privacy, Blockchain Analytics, Cloud Security

## **PUBLICATIONS**

- Pandey, G., C, K. K., Lamichhane, N. and Subedi, U. (2023). CNN based System for Automatic Number Plate Recognition. Journal of Soft Computing Paradigm, 5(4), 347-364. doi:10.36548/jscp.2023.4.002
- Pandey, G., Sunar, A., Yogi, J., Poudel, N. and Koirala, K. R. (2023). Electronic Health Record Management System using RFID: Improving Efficiency and Accuracy in Healthcare. Journal of Information Technology and Digital World, 5(3), 274-290. doi:10.36548/jitdw.2023.3.004
- Sunar, A., Lamichhane, B., **Pandey, G.**, Yogi, J. and Poudel, N. (2023). Trek Monitoring System: Enhancing Safety and Adventure in the Outdoors using Arduino UNO and NodeMCU. Journal of Electronics and Informatics, 5(3), 235-252. doi:10.36548/jei.2023.3.001

#### EDUCATION

## Rochester Institute of Technology

Rochester, NY, USA

PhD in Computing and Information Sciences

Aug 2024 - Present

• Relevant Courses: Research Methods, Research Foundations, Quantitative Foundations, Cryptocurrency/Blockchain Analytics

## Tribhuvan University (Institute of Engineering)

Pokhara, Gandaki, Nepal

Bachelor's in Electronics, Communication and Information Engineering

Nov 2018 - Sep 2023

• Relevant Courses: Computer Network, Wireless Communications, Embedded Systems, Artificial Intelligence, Data Mining, Big Data Technologies, Operating Systems, Data Structure and Algorithms

#### EXPERIENCE

## Graduate Research and Teaching Assistant

Rochester, NY, USA

Rochester Institute of Technology

Aug 2024 - Present

 Researched exploring timing attack vectors on different microarchitectures and worked as a teaching assistant for the CSEC 622: Side Channel Analysis course.

#### CERTIFICATIONS

#### Reactor Certification, Chainalysis

Nov 2024

• Acquired knowledge and skills to analyze and trace transactions on the Bitcoin blockchain using the Chainalysis Reactor tool.

# Cryptocurrency Fundamentals Certification, Chainalysis

Oct 2024

• Gained insights into cryptocurrency fundamentals, including blockchain technology and cryptocurrency, and learned to utilize blockchain explorers to investigate Bitcoin transactions.

#### Cyber Security Specialization, Coursera

Jan 2024 – Mar 2024

• Covered four courses on Introduction to Cyber Attacks, Cyber Attack Countermeasures, Real-Time Cyber Threat Detection and Mitigation, Enterprise and Infrastructure Security.

## Datacom Cybersecurity Job Simulation, Forage

Feb 2024

• Completed a job simulation focused on how Datacom's cybersecurity team helps protect its clients.

• Investigated a cyberattack and reported the key recommendations to improve the client's cybersecurity posture.

#### Tata Cybersecurity Security Analyst Job Simulation, Forage

Feb 2024

- Completed a job simulation involving identity and access management (IAM) for Tata Consultancy Services.
- Acquired expertise in IAM, cybersecurity best practices, and strategic alignment with business objectives.

## Google Cybersecurity Professional Certificate, Coursera

May 2023 - Oct 2023

 Covered topics including Security Risk Management, Network Security, Linux and SQL tools, Threat Detection and Response, and Python-based Cybersecurity Task Automation.

#### Blockchain Specialization, Coursera

Feb 2023 – Apr 2023

• Obtained insights on the foundations of blockchain, smart contracts, decentralized applications (Dapps), and blockchain platforms.

#### PROJECTS

## Trek Monitoring System: Enhancing Safety and Adventure in the Outdoors

- Built a prototype gadget that updates trekkers about current location, humidity, weather forecast, and basic health information like body temperature, and heart rate.
- Published as a paper in the Journal of Electronics and Informatics.

## RFID-based Electronic Health Record Management System

- Developed an RFID-based system to securely record and access electronic health records.
- Published as a paper in the Journal of Information Technology and Digital World.

# Agrobot: Multi-Function Agricultural Robot

• Prototyped a remote controller-based machine to plough fields, sow seeds, and water plants.

#### SKILLS

- **Programming:** C, C++, Assembly, Python
- Database: MySQL, MongoDB
- Tools: GNU Assembler, Reactor, Arduino Uno
- Misc: OpenWrt, LaTeX, Git, Linux
- Languages: English, Nepali, Hindi

## Honors and Awards

#### • Scholarship/Assistantship for PhD

Received a merit-based scholarship at RIT to pursue a PhD in Computing and Information Sciences.

#### • Winner - Battle for Speed

Achieved first position in a robotic racing competition organized by the Robotics Club, IOE, Tribhuvan University.

#### • Full Scholarship for Undergraduate Studies

Awarded by Nepal Government for securing rank in Tribhuvan University, Institute of Engineering entrance examination.