

PARIBESH REGMI

Graduate Research Assistant — Rochester Institute of Technology

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EDUCATION

Computing and Information Science

Ph.D. Degree

Advisor: Prof. Rui Li

Rochester Institute of Technology

2021 - Present

Electronics and Communication Engineering

Bachelor's degree

Thesis: Nepali Speech Recognition Using RNN-CTC Model

IOE, Tribhuvan University

2014 - 2018

WORK EXPERIENCE

Lab of Use-Inspired Computational Intelligence (LUCI)

Graduate Research Assistant

2021 - Present

Rochester, New York

LogPoint

Solutions Engineer

2018 - 2021

Lalitpur, Nepal

- Troubleshoot system/software issues at the customer's end.

RESEARCH INTERESTS

Statistical Machine Learning (ML), Deep Learning (DL), Bayesian Methods, Bayesian Model Selection, Deep Graph Learning, Federated Learning

PUBLICATIONS

AdaVAE: Bayesian Structural Adaptation for Variational Autoencoders (accepted, NeurIPS 2023)

Paribesh Regmi; Rui Li

Thirty-Seventh Conference on Neural Information Processing Systems (NeurIPS), 2023

Predicting Biomedical Interactions with Probabilistic Model Selection for Graph Neural Networks

Kishan KC; Rui Li; Paribesh Regmi; Anne Haake

under submission

Nepali Speech Recognition Using RNN-CTC Model

Paribesh Regmi; Arjun Dahal; Basanta Joshi

International Journal of Computer Applications, 2019

CURRENT RESEARCH / PROJECTS

Bayesian model selection in deep learning

Adopting Bayesian model selection method to infer an optimal model structure in supervised/unsupervised deep learning, guided by the data.

Relaxing structural constraints in federated learning

Relax the structural constraints in federated learning tasks, allowing clients to have their own independent and personalized network structure.

Representation learning on graphs

Enhancing graph representations by inferring appropriate neighborhood scope for message aggregation in a graph neural network.

Leveraging deep learning in graphs for biomedical interaction prediction

Tailoring the existing graph learning models for biomedical datasets to boost their performance in predicting interactions between biomedical entities.

AWARDS

Fully funded Ph.D./ Research Assistantship at RIT (2021)

Full financial support for my Ph.D. from NSF grants

Fusemachine AI Fellowship Award (2017)

Fellowship offered by Fusemachines (fusemachines.com) for AI and Machine Learning study

Full Scholarship for Bachelor's in Engineering (2014)

Ranked 28th among 13,000 applicants in the engineering entrance examination to gain a full scholarship

SKILLS

Programming	General: Python, moderate expertise in Java and C++; ML and DL: pytorch, scikit-learn, numpy; Visualization: matplotlib
Troubleshooting	Solving system(Linux) and software related issues. 3 years of work experience in troubleshooting.
Leadership	Former event manager at Nepalese Student Association, Rochester Institute of Technology (NSA-RIT)
Languages	Nepali, English (Speaking, Reading, Writing)