PARIBESH REGMI

Graduate Research Assistant — Rochester Institute of Technology
Email: pr8537@rit.edu ✻ Contact: +1-585-490-7306

EDUCATION

Computing and Information Science — *Rochester Institute of Technology*
PhD Degree — *2021 - Present*
Advisor: Rui Li

Electronics and Communication Engineering — *IOE, Tribhuvan University*
Bachelor's degree — *2014 - 2018*
Thesis title: Nepali Speech Recognition Using RNN-CTC Model

WORK EXPERIENCE

Lab of Use-Inspired Computational Intelligence (LUCI) — *2021 - Present*
Graduate Research Assistant — *Rochester, New York*

LogPoint — *2018 - 2021*
Solutions Engineer — *Lalitpur, Nepal*

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

RESEARCH INTERESTS

Statistical Machine Learning, Bayesian Methods, Bayesian Model Selection in Deep Learning, 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
arxiv.org

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.

SKILLS

Programming	Machine learning and deep learning libraries: pytorch, scikit-learn, numpy. Visualization: matplotlib
Leadership	Former event manager at Nepalese Student Association, Rochester Institute of Technology (NSA-RIT)
Languages	Nepali, English (Speaking, Reading, Writing)

OTHER INTERESTS

Music: Love playing the piano and guitar
Sports: Soccer, Table tennis
Besides, I like socializing, hiking and travelling.