Pradeep Bajracharya

Personal Site: bajrapradeep.com.np Email: pb8294@rit.edu
LinkedIn: www.linkedin.com/in/pradeepbajracharya

Education

PhD in Computing and Information Sciences **2018 - Present**
Rochester Institute of Technology, Rochester, NY, USA (3.92/4.00) GPA
Advisor: Dr. Linwei Wang
Research Group: CBL Lab
Relevant Courses: Deep Learning, Statistical Machine Learning, Image Processing and Computer Vision, Probability and Noise System Modeling

Bachelor in Electronics and Communication Engineering, **2011 - 2015**
Pulchowk Campus, Tribhuvan University, Nepal (82.97%)

Scholarships & Awards

Prof. F.N. Trofimenkoff Academic Achievement Award **2019**
for graduating top of the class (2015) in BE Electronics and Communications Engineering, Nepal

RIT Ph.D. Merit Scholarship, Financial assistance for Ph.D. studies **2018 - Present**

Ncell Scholarship and Excellence Award, NRs. 100,000 to top student of BE Electronics and Communications, Electrical and Communication, and Computer, Nepal **2015, 2016**

The College Fellowship Scholarship, in each semester and **Full-fee scholarship** in semester I/II, Nepal **2011 - 2015**

Techinical Skills

Languages : Python, C++, Matlab
Deep Learning Tools : PyTorch, Basic Tensorflow, and Keras

Journal Article

Embedding High-dimensional Bayesian Optimization via Generative Modeling: Parameter Personalization of Cardiac Electrophysiological Models
Dhamala, J., **Bajracharya, P.**, Arevalo, H. J., Horcek, B. M., Wu, K. C., Trayanova, N. A., Wang, L. *Medical Image Analysis (MedIA), 2020*

Conference Article

Semi-supervised Medical Image Classification with Global Latent Mixing
Gyawali, P. K., Ghimire, S., **Bajracharya, P.**, Li, Z., Wang, L. (2020). Semi-supervised Medical Image Classification with Global Latent Mixing. arXiv preprint arXiv:2005.11217.
Medical Image Computing and Computer Assisted Intervention(MICCAI), 2020

Indoor Odometry and Point Cloud Mapping Ligal, P. S., Acharya, B., **Bajracharya, P.**, Shrestha, P., Pokharel, P., Ghimire, S. K. Indoor Odometry and Point Cloud Mapping.
Proceedings of IOE Graduate Conference, 2017

Experience

Research Assistant **Jun 19 - Present**
Computational Biomedicine Lab
Rochester Institute of Technology, NY, US
Research area: Bayesian active learning and its use for uncertainty quantification in-multiscale multi-physics models. Currently working on Deep Active Learning to model from limited annotated medical data.

Teaching Assistant **Aug 18 - May 19**
Imaging Science Department
Rochester Institute of Technology, NY, US

Teaching Assistant **April 16 - Aug 16**
Department of Electronics and Computer Engineering
Pulchowk Campus, Tribhuvan University, Nepal

System Engineer **Nov 15 - April 16**
E&T Nepal Pvt. Ltd., Lokanthali, Bhaktapur, Nepal
Development of Calculation Solver for CFD simulation with CUDA on NVIDIA GPUs for simulation software "MUJO"

Extra Projects

Gesture recognition for understanding American Sign Language
A deep learning based implementation of gesture recognition on Kaggle MNIST dataset and Kaggle dataset for ASL Alphabet to understand the gesture hand shapes signed in front of a camera.

- **Tools:** Keras and OpenCV

Certification

• **Neural Networks and Deep Learning** by deeplearning.ai on *Coursera*
Verify : coursera.org/verify/3MPX68UEQPTL
• **Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization** by deeplearning.ai on *Coursera*
Verify : coursera.org/verify/BGCCNBWNM5LY
• **Build Basic Generative Adversarial Networks (GANs)** by deeplearning.ai on *Coursera*
Verify : coursera.org/verify/4LNV43GKRDUM
• **Bayesian Methods for Machine Learning** by National Research University Higher School of Economics on *Coursera*
Ongoing