CURRICULUM VITAE

Bal Krishna Nyaupane

Pokhara, Kaski, Gandaki, Nepal bkn@wrc.edu.np

Mobile: +977- 9851132890

OBJECTIVE

As a highly self-motivated lecturer and researcher with 14+ years of experience in teaching a variety of graduate and undergraduate courses, my main goal is to serve students and contribute to a growing Computer Science and Engineering Department at a renowned University. I am deeply committed to providing creative, high-quality educational materials and to create the best educational environment possible. I have published 10+ journals. I can enhance my knowledge and research skills in the rapidly growing application fields of AI/ML/DL and contribute to developing novel solutions for real-world problems.

EDUCATION

Mälardalen University, Sweden

Master of Science in Computer Science with specialization in Software Engineering, 2014 **Thesis:** Testing a Timing Analysis tool: SWEET

Tribhuvan University, Institute of Engineering, Nepal

Bachelor's Degree in Computer Engineering, 2007

TEACHING EXPERIENCE

Institute of Engineering, Tribhuvan University Present

5/2018 -

Assistant Professor

Courses taught:

- Machine Learning and Pattern Recognition,
- Advanced Data Mining,
- Artificial Intelligence,
- Data Mining,
- Database Management System,
- Computer Graphics,
- Object Oriented Programming (C++),
- Computer Programming C,
- Data Structure and Algorithm, and
- Discrete Structure

Hillside College of Engineering, Purwanchal University

6/2014 - 5/2018

Academic Director, Senior Lecturer

Courses taught:

- Object Oriented Programming (C++)
- Computer Programming C

Advanced College of Engineering & Management, IOE, TU

3/2008 - 8/2012

Lecturer

Courses taught:

- Object Oriented Programming (C++),
- Computer Programming C,
- Data Structure and Algorithm,
- Database Management System,
- Theory of Computation,
- Computer Graphics, and
- Artificial Intelligence

PROFESSIONAL SKILLS

Programming: C & C++, Java, Python, and PyTorch

Databases: SQL Server, and My SQL NoSQL: MongoDB and Cassandra

Tools: Jupiter, Spyder, Net Beans, Turbo C++, and Dev C++

Machine Learning: Support vector machines (SVM), Ensemble Methods, K-NN, Naïve Bayes Method, Neural Networks, Transfer Learning, and Deep Learning Machine Learning Libraries: Keras, TensorFlow, Matplotlib, Seaborn, Pandas,

NumPy, Scikit-learn, and PyTorch

Specializations Courses: Deep Learning Specialization, Generative Adversarial Networks Specialization, Applied Data Science with Python Specialization, and Recommender Systems Specialization.

HONORS AND AWARDS

- 1. Scholarship granted from ERASMUS MUNDUS IDEAS Action 2 programme For Master Degree at Mälardalen University, Sweden.
 - This scholarship was granted based on the Bachelor's degree grade, teaching experience, and Professor's recommendation. This scholarship covered tuition fees, living costs, and medical insurance.
- 2. Granted Four years Scholarship for Bachelor's Degree in Computer Engineering at Advanced College of Engineering and Management, IOE, TU.
 - This scholarship was granted based on the merit of the Entrance Examination conducted by the IOE, TU. This scholarship covered full tuition fee for four years.
- 3. College Batch Topper: College Batch Topper in the class of 33 students in Advanced College of Engineering and Management, Tribhuvan University.

- PUBLICATIONS

 1. *Bal Krishna Nyaupane*, Subarna Shakya "Age, Gender, and Ethnicity Prediction using Deep Separable Convolutional Neural Networks" International Multidisciplinary Conference Dubai, March-2022
- 2. *Bal Krishna Nyaupane*, Rupesh Kumar Sah, Bishnu Hari Paudel, Subarna Shakya "Grayscale Image Colorization using MSE, BCE and MAE Losses for U-Net and patchGAN" International Journal of Advanced Engineering (IJAE), Vol. 05, No. 01, March 2022, Pages 8-17, Publisher ICT-Advanced Engineering Society

- 3. *Bal Krishna Nyaupane*, Rupesh Kumar Sah, Bishnu Hari Paudel "Alphanumeric CAPTCHA Recognition Using CNN-BiLSTM Network" 8th International Conference on Advanced Engineering and ICT-Convergence 2022 (ICAEIC-2022), January 18-21, 2022
- 4. *Bal Krishna Nyaupane*, Rupesh Kumar Sah, Kiran Chandra Dahal "SVM, KNN, random forest, and neural network-based handwritten Nepali barnamala recognition" Journal of Innovations in Engineering Education, Vol. 4, No. 2, December 2021
- 5. *Bal Krishna Nyaupane*, "Pneumonia of Chest X-Ray Images detection using VGG Architectures" LEC Web-Based First International Conference on Engineering and Technology, 4th December 2021
- 6. Jupiter Tamrakar, *Bal Krishna Nyaupane* "Synthesizing Human Face Image from Textual Description of Facial Attributes Using Attentional GAN", 10th IOE Graduate Conference, September 2021
- 7. Bishon Lamichhane, *Bal Krishna Nyaupane*, Smita Adhikari "English Speech Recognition Using Convolution Neural Network, Gated Recurrent Unit, and Connectionist Temporal Classification" 10th IOE Graduate Conference, September 2021
- 8. *Bal Krishna Nyaupane*, Rupesh Kumar Sah "Fine-tuning of ResNet pre-trained models for Diabetic Retinopathy Stages Classification" International Journal of Advanced Engineering, Vol. 04, No. 02, September 2021
- 9. Sangharsha Bidari, *Bal Krishna Nyaupane* "An Approach for Damaged Facial Image Restoration using GAN" 9th IOE Graduate Conference, March 2021

PARTICIPATION ON WORKSHOP AND CONFERENCE

- 1. 4th National Workshop on Machine Learning and Data Science, 15th-19th September, 2021 as a Project Mentor
- 2. 3rd National Workshop on Machine Learning and Data Science, 30th July- 3rd August, 2020 as a Project Mentor
- 3. Participated at Three days "Workshop on Data Management and Analysis (SPSS Focused)" held from 3-5 July, 2017 organized by Kathford International College of
- 4. Engineering and Management.
- 5. Paper presented at "SET Conference 2016" held on November 16, 2016 organized by Department of Electronics and Computer Engineering, Advanced College of Engineering and Management.
- 6. Participated at "The 12th International Conference on Computing and Information Technology" organized by King Mongkut's University of Technology North Bangkok
- 7. Participated on Two days "*Training on Effective Teaching Methodology* "held on 13-14 May, 2016organized by Hillside College of Engineering.
- 8. Participated at Three days "ICT Expo and Conference 2009" held from 12-14 June,
- 9. 2009 organized by School of IT and Engineering, Whitehouse College of Science and Engineering.
- 10. Attended on One Day "Workshop on Robotics & Automation 2006" organized by Robotics Club, Institute of Engineering
- 11. Participated on "*Robo Shooter 2005*" Second National Robot Competition organized by Institute of Engineering
- 12. Attended on One Day "Workshop on Robotics & Automation 2005" organized by Robotics Club, Institute of Engineering.