Kalanki, Kathmandu, Box 44600, Bagmati Zone, Nepal
Nationality: Nepalese, m/y of Birth: August 1993
rabindralamsal@outlook.com
https://rlamsal.com.np/

Rabindra Lamsal

Education

M.Tech, Computer Science and Technology, Jawaharlal Nehru University, New Delhi, 2017–2019.

CGPA: 8.70 out of 9.0, Equivalent percentage: 92%

Thesis Title: Disaster Response using Artificial Intelligence

Thesis work graded 9.0/9.0 by both external and internal examiners

BE, Computer Engineering, Kathmandu University, Dhulikhel, 2012–2016.

CGPA: 3.08 out of 4.0

12th, Science stream, HSEB, United Academy, Lalitpur, 2009–2011.

Percentage: 81.04%

Appointments

Project Associate, Special Centre for Disaster Research, Jawaharlal Nehru University, New Delhi, 2018–2019.

Developed two Artificial Intelligence-based Disaster Response Systems.

Junior System Administrator, Annapurna Post, Corporate Tower, Kathmandu, 2016–2017.

Worked on DHCP server, Firewall, NAT, DNS server, Web server.

Founder Coordinator, Kathmandu University WordPress Club, Dhulikhel, 2015–2016.

System Administrator, Kathmandu University Boys Hostel, Dhulikhel, 2014–2015.

Deployed a LINUX based networking environment. Managed bandwidth.

Senior Volunteer, Help Nepal Network (HeNN), Kathmandu, 2013–2016.

Installed and monitored electronic libraries (Linux Terminal Server Project - LTSP) at various remotely established governmental educational institutions

Trainer, Community Education Project (CEP), Kathmandu University, Dhulikhel, 2013.

Research Interests

Machine Learning, Deep Learning, NLP

Abilities

Libraries: Scikit-learn, NLTK, NumPy, TensorFlow; **Language**: Python, JAVA, C++; **Linux SysAdmin**; **Typesetting**: LaTeX

Publications

Papers accepted as Book Chapters

Rabindra Lamsal and T.V. Vijay Kumar. 2019. Artificial Intelligence and Early Warning Systems. *Global Symposium on Artificial Intelligence in Governance and Disaster Management.* March 11-13, 2019, New Delhi, India. [abstract]

Rabindra Lamsal and T.V. Vijay Kumar. 2019. Artificial Intelligence based Disaster Response Systems. *Fourth World Congress on Disaster Management.* January 29-February 1, 2019, Indian Institute of Technology Bombay, India. [abstract]

Rabindra Lamsal and T.V. Vijay Kumar. 2018. Artificial Intelligence Based Early Warning System for Coastal Disasters. *International workshop on 'Reinforcing Coastal Zone Management: Saving Lives, Habitats and Livelihood of People'.* November 15-18, 2018, New Delhi, India. [abstract]

Journal articles

Rabindra Lamsal and T.V. Vijay Kumar. 2019. Improving Twitter based Disaster Response using Deep Learning. (manuscript ready) [abstract]

Rabindra Lamsal and T.V. Vijay Kumar. 2019. Twitter based Disaster Response using Machine Learning. (manuscript ready) [abstract]

Rabindra Lamsal and T.V. Vijay Kumar. 2018. Classifying Emergency Tweets for Disaster Response. (communicated). [abstract]

Preprints at arXiv

Rabindra Lamsal and Shubham Katiyar. 2018. Determining Optimal Number of k-Clusters based on Predefined Level-of-Similarity. [arXiv]

Rabindra Lamsal and Ayesha Choudhary. 2018. Predicting Outcome of Indian Premier League (IPL) Matches Using Machine Learning. [arXiv]

Grants & allowances

Honorariums and allowances (2018-2019), Special Centre for Disaster Research, Jawaharlal Nehru University, New Delhi, India.

Travel and Accommodation grant (2019). Fourth World Congress on Disaster Management, Indian Institute of Technology (IIT) Bombay, Mumbai, India.

Travel grant. Allowances (2015). LTSP Project. Help Nepal Network.

Academic projects

Live Twitter Sentiment [web application]

An LSTM deep network deployed as a core part of a web app. The VM was optimized for monitoring the real-time Twitter stream and performing sentiment analysis.

Twitter Based Disaster Response System

Disaster Response System targeted for Coastal disasters

Projects completed as a part of M.Tech thesis.

Word Vectors for 0.5 million Nepali words/phrases

Word2Vec implementation of a Nepali language corpora having 100 million running words.

Indian Premier League (IPL) Matches Prediction Model

A machine learning model capable of predicting the outcome of an IPL match, 15 minutes before the gameplay.

Fabrication of Microstrip Patch Antenna

A Microstrip Patch Antenna designed in MATLAB, simulated in Computer Simulation Tool (CST) and fabricated in Lab. Project carried out as a part of the course *Wireless Sensor Networks*.

Inventory Management System

A complete Inventory Management System, written in PHP and MySQL. Project carried out as a part of the course *Database Management Systems*.

Noise Buzzer

An embedded system capable of detecting noise, and triggering sound alarm whenever the noise is above a certain threshold value. Project carried out as a part of the course *Embedded Systems*.

Duckworth-Lewis Calculator

An android application to calculate revised cricket scores after a game is interrupted due to rain. Project carried out as a part of *Engineering Project*.

Car Racing Game

A C language based 2D car racing game, selected for showcasing at CAN Softech 2013, organized by Computer Association of Nepal. Project carried out as a part of *Engineering Project*.

sports (recent)

First (Table Tennis Doubles) and Runner-up (Table Tennis Singles). Chandrabhaga Hostel Sports Week 2019, Jawaharlal Nehru University, New Delhi

Voluntary works

Organized IT MEET (2016, 2013), Kathmandu University.
Contributed as System Developer at Sports Week (2016), Kathmandu University.
Organized various WordPress Workshops (2015 - 2016).
Volunteered in IT MEET (2014), Kathmandu University.
Executive Member (2013 - 2015) of Kathmandu University Computer Club.
Participated in Google Translate Community (2014).
Volunteered in National Workshop (2014) on the 'Primer Series on ICTD for Youth': Project Management and ICTD.

Effort in Public awareness

Wrote for a tech news column in Nepal's National Daily (2016-2017)

The topics included, but were not limited to, LINUX (51760), Navigation (57851), Android (54788, 54367, 57445), Web & Internet (59921, 55189, 56100, 55673).

Referees

Available upon request.