# **BIMAL BHATTARAI**

# PERSONAL INFORMATION

DATE OF BIRTH: Nepal | December 26, 1991

ADRRESS: Grimstad, Norway
MOBILE: +47- 46214690

EMAIL: bimal.bhattarai@uia.no, bobsbimal58@gmail.com

bhattaraibimal.com.np

## **EDUCATION**

2001-2015 BE in Electronics and Communication, JNTUA,

Kavali, India

2017-2019 MSc. in ICT, Chosun University, South Korea

2019-2023 PhD in Artificial Intelligence, University of Agder, Norway

#### LINKS

Facebook:// bimal.bhattarai.165 Github:// bobsbimal58 LinkedIn:// bimal-bhattarai Twitter:// @Bobsbimal58

#### **COURSES**

# 4.1 PhD

Advanced Pattern Recognition Principle of Artificial Intelligence Learning in Random Environments Deep Learning Specialization

#### 4.2 Masters

Estimation and Optimization Advanced pattern recognition and media understanding Multimedia Image processing Robot Navigation Mobile Computing

## 4.3 Teaching

Distributed System and Big Data (more than 200 hours) Learning Systems (110 hours)

#### WORK EXPERIENCE

ZTE PVT. LTD. | BASE STATION ENGINEER

October 2016 - March 2017 | Nepal

ZTE PVT. LTD. | BASE STATION ENGINEER INTERN

September 2016 - October 2016 | Nepal

## RESEARCH

#### WMCS LAB

#### **GRADUATE RESEARCH ASSISTANT**

March 2017 - March 2019 | South Korea

Graduate research assistant at Wireless and Mobile Communication System (WMCS) Lab. Worked in a project related to Indoor Positioning System using Bluetooth, magnetic field, and augmented reality to design an commercial android application and tested it in the university building.

#### CAIR GROUP

#### PHD RESEARCHER

September 2019 - September 2023 | Norway

PhD at CAIR - Centre for Artificial Intelligence Research, one of the biggest AI group in Norway. Currently, working under supervision of Prof. Ole-Christoffer Granmo Prof Ole-Christoffer Granmo to design better chatbots using NLP and explainable AI.

#### AWARDS AND SCHOLARSHIPS

Selected as a PhD researcher at University of Agder
Excellent International Student Scholarship provided by Chosun University
BEST NETWORK DESIGN AWARD
Won india's Biggest Networking Championship (IBNC) conducted by Indian Institute of Technology (IIT).
Partial Scholarship provided in Bachelor program
Nobel merit full Scholarship provided by High School
Moon light merit full scholarship provided by secondary school

#### **SOFTWARE**

Over 5000 lines: PYTHON, Android, ŁTŁX Over 1000 lines: C, MySQL, Cython, Access

#### **PUBLICATIONS**

- [1] B. Bhattarai, K. D. Abeyrathna, M. Goodwin, S. Gorji, O. C. Granmo, L. Jiao, R. Saha, and R. K. Yadav. Massively Parallel and Asynchronous Tsetlin Machine Architecture Supporting Almost Constant-Time Scaling. In *The Thirty-eighth International Conference on Machine Learning (ICML 2021)*. ICML, 2021.
- [2] B. Bhattarai, H.-S. Gang, and J.-Y. Pyun. Deep neural network architecture for geomagnetic based indoor positioning system. In *Korea Telecommunications Society Conference*, pages 1408–1409.
- [3] B. Bhattarai, O.-C. Granmo, and L. Jiao. Measuring the novelty of natural language text using the conjunctive clauses of a Tsetlin machine text classifier. In *Proceedings of ICAART*, 2021.
- [4] B. Bhattarai, O.-C. Granmo, and L. Jiao. Convtexttm: An explainable convolutional tsetlin machine framework for text classification. In *Proceedings of the Language Resources and Evaluation Conference*, pages 3761–3770, Marseille, France, June 2022. European Language Resources Association.
- [5] B. Bhattarai, O.-C. Granmo, and L. Jiao. Explainable tsetlin machine framework for fake news detection with credibility score assessment. In *Proceedings of the Language Resources and Evaluation Conference*, pages 4894–4903, Marseille, France, June 2022. European Language Resources Association.
- [6] B. Bhattarai, O.-C. Granmo, and L. Jiao. A tsetlin machine framework for universal outlier and novelty detection. In Agents and Artificial Intelligence. Springer International Publishing, 2022.

- [7] B. Bhattarai, O.-C. Granmo, and L. Jiao. Word-level human interpretable scoring mechanism for novel text detection using tsetlin machines. *Applied Intelligence*, 2022.
- [8] B. Bhattarai, S.-S. Hwang, and J.-Y. Pyun. An efficient geomagnetic indoor positioning system using smartphones. In *The 3rd International Conference on Next Generation Computing*, 07 2018.
- [9] B. Bhattarai, R. K. Yadav, H.-S. Gang, and J.-Y. Pyun. Geomagnetic field based indoor landmark classification using deep learning. *IEEE Access*, 7:33943–33956, 2019.
- [10] R. Kumar Yadav, B. Bhattarai, L. Jiao, M. Goodwin, and O.-C. Granmo. Indoor space classification using cascaded lstm. In 2020 15th IEEE Conference on Industrial Electronics and Applications (ICIEA), pages 1110–1114, 2020.
- [11] R. K. Yadav, B. Bhattarai, H.-S. Gang, and J.-Y. Pyun. Trusted k nearest bayesian estimation for indoor positioning system. *IEEE Access*, 7:51484–51498, 2019.

## **PATENT**

B. Bhattarai, J. Y. PYUN, and H. S. GANG. Magnetic field based indoor positioning method using smart device and system having the method, Sep 2019, Link.