Bhaisepati, Lalitpur,Box: 44600, Bagmati Zone, Nepal Nationality: Nepalese, m/y of Birth: February, 1998 (977) 9863062540 ****prabinent7@gmail.com ☑

PRABIN SHARMA

Education

BE, Computer Engineering

Kathmandu University, Dhulikhel, 2014–2017.

UTAD – Universidade de Trás-os-Montes e Alto Douro, Vila real, Portugal, 2017-2018 (*ERASMUS*+ Student Mobility Scholarship).

12th, Science stream, HSEB, St. Xavier's College, Maitighar, 2012–2014.

Work Experience

Remote Computer Vision researcher: Feb 2020-Aug 2020 at Mary MacKillop Institute for Health Research, Melbourne

Research on Drowsiness detection using eye image classification and EEG data.

AI Developer: Feb 2019-Feb 2020 Inspiring Lab, Lalitpur, Nepal.

Designed predictive models for various machine learning projects.

Undergraduate Research Scholar, Human-computer Interaction Lab, UTAD, Vila real, Portugal, October 2017- July 2018.

Developed projects based on computer vision for e-learning platform.

President, Kathmandu University Youth Red Cross Circle, Dhulikhel, Nepal, 2016.

Trainer, Community Education Project (CEP), Kathmandu University, Dhulikhel, 2015. Conducted training on Basic Coding and Designing to students at Alpine school.

Research Interests

Affective Computing, Machine Learning (Data Analysis and Image Processin), Deep Learning, Human-Robot Interaction, Natural Language Processing, Human-Computer Interaction

Abilities

Libraries: Numpy, Pandas, Mathplotlib, Scikit-learn, TensorFlow; **Languages**: JavaScript, SQL, Express, Jquery, Python, MATLAB; **OS**: LINUX, Windows; **Typesetting**: LATEX

Publications

Book chapters

Prabin Sharma, Meltem Esengönül, Salik Ram Khanal, Tulasi Tiwari Khanal, Vitor Filipe and Manuel J. C. S. Reis. 2019. *Student Concentration Evaluation Index in an E-learning Context Using Facial Emotion Analysis*. International Conference on Technology and Innovation in Learning, Teaching and Education: Aristotle University of Thessaloniki, Greece.

- Prabin Sharma, Mala Deep Upadhaya, Amrit Twanabasu, Joao Barroso, Salik Ram Khanal and Hugo Paredes. 2019. "Express Your Feelings": An Interactive Application for Autistic Patients. 13th International Conference, UAHCI 2019, Held as Part of the 21st HCI International Conference, HCII 2019, Orlando, FL, USA, July 26–31, 2019, Proceedings, Part II.
- **Prabin Sharma**, Sambad Bidari, Antonio Valente, Hugo Paredes "Towards blind user's indoor navigation: a comparative study of beacons and decawave for indoor accurate location. (Accepted for DSAI 2020).
- Joanna Joanna C. Justus, **Prabin Sharma**, Richard D. Jones, Govinda R. Poudel "Sensors and Systems for Monitoring Mental Fatigue: A Review. (In Progress 2020).

arXiv preprint

- **Prabin Sharma**, Shubham Joshi, Subash Gautam, Vitor Filipe, Manuel J. C. S. Reis "Student Engagement Detection Using Emotion Analysis, Eye Tracking and Head Movement with Machine Learning. IET Computer Vision: SPECIAL ISSUE ON: Computer Vision for Smart Cameras and Camera Networks. (submitted to a journal)
- Project grant. HCII 2019: Universal Access in Human-Computer Interaction. Multimodality and Assistive Environments. Financed by National Funds through the Portuguese funding agency, FCT Fundação para a Ciência e a Tecnologia within project: UID/EEA/50014/2019.
- Travel and Accommodation grant (2018). International Conference on Technology and Innovation in Learning, Teaching and Education, Thessaloniki, Greece (supported by Project "NanoSTIMA: Macro-to-Nano Human Sensing: Towards Integrated Multimodal Health Monitoring and Analytics/NORTE-01-0145-FEDER-000016" financed by the North Portugal Regional Operational Programme (NORTE 2020), under the PORTUGAL 2020 Partnership Agreement, and through the European Regional Development Fund (ERDF).
- Community Education Project (CEP) 2016: Grant for launching smart e-library in remote part of Dolakha District, Nepal (supported by Kathmandu University).
- MERGING VOICES Project Travel and living Aid for Fall semesters 2017 in Host university (UTAD Universidade de Trás-os-Montes e Alto Douro). Funded by European Union
- MERGING VOICES Project Travel and living Aid for spring semester 2018 in Host university (UTAD Universidade de Trás-os-Montes e Alto Douro). Funded by European Union
- Need-Based scholarship for Undergraduate study (supported by Kathmandu University) 2014-2017.

Projects

Drowsiness detection 2019-present.

Grants and Scholarships Classification of eye region into several stages: An on-going research project under Faculty of Health Sciences, Australian Catholic University, Melbourne, Australia.

Express your Feelings, 2018

Developed an android based application for autistic patients.

N-Event

Created an android application to find an event happening around the locality. *Student Engagement Detection, 2018*

Used emotion analysis, eye-tracking and head movement in machine learning to classify engagement level of a student.

Help-bot, 2017

Built a chat-bot that used Case Base Reasoning (CBR) for automated question-answering.

Referees

Dr. Hugo Paredes (Final year Project Supervisor)

Assistant Professor with Habilitation

UTAD - Universidade de Trás-os-Montes e Alto Douro, Vila real, Portugal.

Former Visiting Faculty @ Carnegie Mellon University

Human Computer Institute

Pittsburgh, Pennsylvania

Email: hparedes@utad.pt

Dr Govinda Poudel (Current Research Supervisor)

Senior Research Fellow

Mary MacKillop Institute for Health Research,

Australian Catholic University

Melbourne, Australia

Editorial board @ Journal SLEEP by Oxford Academic.

Email: govinda.poudel@acu.edu.au