Jackfin KC

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EDUCATION

2017-2021	BE in Biomedical Engineering (CGPA=3.66/4)	College of Biomedical Engineering and Applied Sciences (CBEAS), Kathmandu
2014-2016	HSEB Board (82.8%)	Kathmandu Model College, Kathmandu
2013-2014	SLC Board (90.13%)	Bhanubhakta Memorial Higher Secondary School, Kathmandu

FINAL YEAR PROJECT

DEEP CONVOLUTIONAL NEURAL NETWORK AND TRANSFER LEARNING FOR MEDICAL IMAGES:

- Datasets of various medical images were analyzed
- Splitting of the dataset was done into Training data, Testing Data, and Validation Data
- Developed deep learning and machine learning algorithms for the detection and classification of brain tumor, skin cancer, pneumonia, and ocular dataset

RESEARCH EXPERIENCE

Machine Learning for biomedical signal processing

SEMESTER PROJECTS

Course	Project Title	Development Environment
Medical Electronics	Design of Automatic Light Control in Street Lamps	Arduino, Electronic Equipment
Communication Systems	Design and Implementation of Amplitude Modulated Wave Signals	Breadboard, Proteus, Oscilloscope
Control Systems	Building of a music player in a Graphical User Interface	MATLAB
Computational System & Database Concept	Implementation of Adaptive Cruise Control System in Automated Cars	MATLAB SIMULINK

INTERNATIONAL PUBLICATIONS

- KC Jackfin, Devkota Kushal, KC Kamal, Acharya Alaka, Shrestha Surendra (2023). Deep Convolutional Neural Network and Transfer Learning for Classification of Cataract based on Fundus Images. 10th International Conference on Advanced Engineering and ICT- Convergence 2023. Bangkok, Thailand
- KC Jackfin, Kunwar Kishori, Pokhrel Menam, Acharya Alaka (2023). Deep Convolutional Neural Networks for Brain Tumor Classification.5th ICEHTMC Congress Scientific Committee, Global Clinical Engineering Alliance, United States [Event to be held in India in November 2023]

INTERNSHIP AND WORK EXPERIENCE

- Techno Biomed Pvt Ltd
- March 2022- June 2022
- Worked as an Intern Biomedical Engineer dedicated to equipment handling and preventive maintenance.
- Brother's Biomedical Trade Link Pvt Ltd
- June-2023- Present
- Worked as a Biomedical Service Engineer dedicated to equipment handling and preventive maintenance

SKILLS

- Image/Signal Processing
- Deep learning/Machine Learning/Artificial Intelligence
- Medical Imaging
- Troubleshooting of medical equipment
- LANGUAGES/TOOLS: MATLAB, MySQL, Python
- **PLATFORMS:** Windows, Linux
- Leadership
- Communication

ACHIEVEMENTS

- Awarded with a Full Merit-based Scholarship in Bachelor
- Topper of Undergrad Entrance Exam
- Final Semester Topper in Undergrad
- Third Topper in Undergrad
- Awarded Mahatma Gandhi Scholarship in grades 11-12
- First position in the 'All Nepal Essay Competition' organized by 'Creative Veterinary Student's Association
- Onsite- training on ENT Workstation provided by G. Heinemann Medizintechnik

EXTRACURRICULAR ACTIVITIES

- Member of Association of Alliance Clubs International
- Member of Youth Red Cross Society of CBEAS
- Member of Robotics Club of CBEAS
- Member of Student Council of CBEAS
- Runner-up in Table Tennis in CBEAS
- Gold Medal in Relay Race and SOLO race in Bhanubhakta Memorial School
- Runner-up in Chess in CBEAS

REFERENCES:

Dr. Kamal KC

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Dr. Alaka Acharya

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