ABHISHEK PAUDEL

Fairfax, Virginia, USA

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EDUCATION

George Mason University, USA *August 2019 - Present*

PhD in Computer Science

Department of Computer Science

Research Interests: Machine Learning, Computer Vision

Tribhuvan University, Institute of Engineering, Nepal *November 2013 - September 2017*

Bachelor of Engineering, Computer Engineering

SKILLS

Programming Languages	Proficient in Python
	Good Experience in C/C++
	Familiar with JavaScript, PHP, MATLAB & Assembly
Libraries & Frameworks	PyTorch, TensorFlow, Keras, scikit-learn,
	NumPy, pandas, matplotlib
Web & Databases	HTML/CSS, Django, Nginx, SQL, MongoDB
Tools & Utilities	Git, LaTeX, Robot Operating System, Microsoft Azure
Languages	English, Nepali, Hindi

WORK EXPERIENCE

United Nations Children's Fund (UNICEF) Nepal *January 2015 - August 2019*

Technical Consultant

- Developed and deployed various SMS based applications along with real-time/off-line analytics for tasks like automated communication with teachers in remote districts, location tracking of UNICEF field staffs and information dissemination & monitoring of UNICEF's cash transfer program.
- Provided technical support in development and deployment U-report platform as a part of Shout Out For Health program initiated by Bill & Melinda Gates Foundation. U-report is a free, SMS-based system that allows young people to speak out on what is happening in communities across their country using their mobile phones, and visualizes the data in real-time.
- Led the development and piloting of the first of its kind SMS based information dissemination and monitoring system for Government of Nepal to enhance its existing management information system used for social security program.
- Drafted technological and programmatic strategy to implement mobile phone based technologies for youth engagement in policy process.

TEACHING EXPERIENCE

George Mason University, USA *August 2019 - Present*

Graduate Teaching Assistant

Affiliated with the Department of Computer Science in Volgenau School of Engineering. Courses assisted: CS584 (Theory and Applications of Data Mining), CS262 (Introduction to Low-Level Programming), CS222 (Computer Programming for Engineers) and CS112 (Introduction to Computer Programming).

MPercept Academy, Nepal *January 2019 - June 2019*
Course Instructor

Taught introductory course on machine learning and data science along with designing and evaluating assignments and projects.

PROJECTS

Monocular Depth Map Estimation
Estimation of depth map using single image based on NYU Depth Dataset v2 and Active Vision Dataset with deep learning based methods.

Pen Path Approximation on MNIST Digits
Extraction of a sequence of coordinate points along the path of digits from images of handwritten digits by making use of techniques like k-means clustering and mean squared error optimization.

Cuisine Classification
Using recipe ingredients to make predictions about the type of cuisine.

2048 AI
An AI that solves the popular 2048 puzzle game using minimax optimization and alpha-beta pruning based on multiple heuristics.

Musick
A recommendation system that recommends music based on the personality of a person inferred from social media using natural language processing techniques.

SlideCast
A tool that allows live broadcasting of presentations to computers and smart phones in a network.

PUBLICATIONS

A. Paudel, B. R. Bajracharya, M. Ghimire, N. Bhattarai and D. S. Baral, "Using Personality Traits Information from Social Media for Music Recommendation," *2018 IEEE 3rd International Conference on Computing, Communication and Security (ICCCS)*, 2018, pp.116-121. DOI:10.1109/CCCS.2018.8586831

AWARDS & ACHIEVEMENTS

Artificial Intelligence MicroMasters®, Columbia University
First Nepal AI Winter School Scholarship
Fusemachines Artificial Intelligence Fellowship
Winner, LOCUS Hack-A-Week
Microsoft YouthSpark Challenge for Change Award
Microsoft Student Partner

EXTRA-CURRICULAR

AI Fellow, Fusemachines
Facilitator, AI for Social Good Workshop, Kathmandu Mini Maker Faire
Software Coordinator, LOCUS National Technological Festival
Event Coordinator, Hult Prize @ Tribhuvan University
Participant, Asia-Pacific HLM3 Youth Innovation Challenge Workshop (Malaysia)
Speaker, Global Innovations for Children and Youth Summit (Finland)
Volunteer, Me to We Youth Volunteer Trip (Kenya)