ABHIJAN WASTI

Website • LinkedIn • Github • abhijanwasti@gmail.com

AR/VR ENGINEER
Imaging scientist with interest in AR/VR technologies and eye-tracking

AR | VR | Eye Tracking | Image Processing | ML
Python | C | C++ | Blender | Unity

Education

Rochester Institute of Technology - *Full Scholarship*	**Rochester, NY**
MS in Imaging Science	**Present**

- Fourier Methods for Imaging, Radiometry, Human Visual Systems
  Advanced Eye Tracking, Procedural Shading, Image Processing and Computer Vision

Institute of Engineering, Tribhuvan University - *Full Scholarship*	**Kathmandu, Nepal**
BE in Electronics and Communication Engineering	**2019**

- Image Processing and Pattern Recognition, Computer Graphics, Artificial Intelligence
- Capstone Project: Aerial View-Based Guidance System
  - Introduced a semi-autonomous two-vehicle navigation system capable of guiding the ground vehicle with dynamic feed from the aerial vehicle

Online Courses: Machine Learning, Computer Vision, Neural Network and Deep Learning, Improving Deep Neural Networks

Work Experience

Graduate Teaching Assistant – *Rochester Institute of Technology*	**Aug 2021 – Present**

- Completed responsibilities as TA for "Imaging Science Fundamentals" with an 87% pass rate

Machine Learning Intern – *FuseMachines Inc.*	**May 2021 – Aug 2021**

- Reviewed and implemented techniques in exploratory data analysis and data visualization
- Reviewed and implemented machine learning pipeline and deep learning architecture
- Created APIs to deploy ML models and used online coding platforms (kaggle, google colab, git)

Embedded Systems Developer – *Machineer Technology Pvt. Ltd.*	**Apr 2021 – Aug 2021**

- Designed and implemented a transformer monitoring system for the urban electricity grid
- Developed a prototype for an autonomous artificial environment control system for solar desiccator
- Developed a prototype for a low-cost sanitary pad dispenser
- Developed a low-cost GPS-less technique for geolocation suitable for a business district

Other Projects (Github)

Halftoning - created a python library that supports halftoning, dithering, and removal of halftoning in images
Space Invaders - implemented the classic arcade Space Invaders using Processing
Colora - built a prototype application that uses image processing to create vector style edits
MazeBall - implemented gyroscope controlled 3-D android maze game with a rolling ball using Unity
Several Audio-Visual Experiences - created multiple projects combining 3D modeling, lighting and shading, rendering, sound design, and compositing using software such as Blender, Adobe After Effects, Adobe Premiere Pro, DaVinci Resolve, etc. (link here)

Leadership

Board Member - *Rotaract Club of Kathmandu*	**2018 - 2021**

- Collaborated with over 120 clubs from all over the world to publish 22 bulletins as chief editor

President - *Robotics and Automation Center*	**2017 - 2018**

- Led the club and managed funds worth $3000, organized training and competitions for 30+ students