# **ABHIJAN WASTI**

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### Areas of Interests

Computer Vision, Image Processing, Computer Graphics, AR, VR, Artificial Intelligence, Machine Learning, Neural Networks, 3D Rendering, Physics Simulations, Material Modelling

## Work Experience

## Junior Analyst - CloudChomp, Inc.

Aug 2020 - Present

- Economic and usage analysis of e-commerce website(s) based on project attributes and machine specification
- Assisted in preliminary data collection, analysis and migration from local server to remote AWS/Azure server

# Hardware Developer - OkayJourney Pvt. Ltd.

Jun 2020 – Aug 2020

- A mobile local server setup for real-time streaming of audio-visual content
- Assisted in development of prototype device and device interfacing

# **Machine Learning Intern** – Aeye Nepal

Mar 2020 - May 2020

- Image segmentation and classification based on machine learning
- Assisted in preliminary data acquisition and image pre-processing

# Selected Projects

Colora

2020

Application that use image manipulation to create unique vector style edit with minimal effort

# **Aerial View Based Guidance System**

Supervised by Prof. Dinesh Baniya Khsatri, Thapathali Campus

2018 - 2019

- Proposed a two-vehicle system capable of utilizing an aerial image of terrain to aid navigation of a ground vehicle using graph theory algorithm
- Focus on image processing, pathfinding, communication and ground vehicle AI

# **Maze Solving Robot**

Constructed at Robotics and Automation Center

2017 - 2018

- Designed and constructed a robot that traverses a maze along a valid path to reach the destination and performs specific actions along the way based on input from the onboard camera
- Focus on image processing, task scheduling and communication

#### Education

# Institute of Engineering, Thapathali Campus

Kathmandu, Nepal

Bachelor's Degree in Electronics and Communication Engineering

2019

- Final Year Project: Aerial View Based Guidance System
- Minor: Image Processing, Big Data and Artificial Intelligence

# St. Xavier's College

Kathmandu, Nepal

High School (Physics)

2015

## Academic Publications

Wasti A., Tripathi S., Regmi S., Yadav S., Kshatri D.B., (2020). An Aerial View Based Guidance System. Innovation in Engineering Education Vol 3, Issue 3

#### Skills and Qualifications

Programming Languages: Python, C++, C, Javascript, HTML, CSS

Applications: Blender, Adobe Suite, Microsoft Office

Languages: Fluent in English and Nepali, conversational Hindi and Spanish

### Relevant Online Courses

Machine Learning (Standford Online)

Computer Vision - Object Tracking with OpenCV and Python

**Neural Networks and Deep Learning** 

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

Logistic Regression with Python and Numpy

### Awards and Certificates

- Participation in MakeUC Hackathon by University of Cincinnati (2020)
- 2<sup>nd</sup> Runner Up in International Robotics Challenge (IRC) at Techfest, IIT Bombay (2017)
- Participation in Bajaj Hackathon at Techfest, IIT Bombay (2017)
- 1st Position in Code Debugging at Tech Bihani 3.0, PACE, ACE (2016)
- 1st Position in Creative Code at Golden Jubilee Celebration, Thapathali Campus (2015)
- Participation in International Space Apps Challenge, ICIMOD, Mercy Corps, NEA and RAN in collaboration with Young Innovations Pvt. Ltd. And KLL (2017)
- Awarded merit-based fully funded scholarship for undergraduate studies
- Awarded "Highest Securing Student of Batch 2013" at Occidental Public School (2013)

## Leadership

### Board Member - Rotaract Club of Kathmandu

2018 - Present

Revived the publication of monthly bulletin and published for 2 years, collaborated with over 120 clubs from all over the world to publish 22 bulletins as chief editor, organized meetings, took minutes, distributed notice and information within as well as outside the club as secretary

#### President - Robotics and Automation Center

2017 - 2018

Supervised the day-to-day operations, represented the club in all major decisions, managed funds worth \$3000, organized training and competitions

## Class Representative - Thapathali Campus

2015 - 2019

Coordinated with the professors to schedule classes and assessments, issued announcements on behalf of the professor, facilitated the distribution of study materials