Oxford, OH, 45056

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#### **CAREER PROFILE**

Proven leader with strong foundation in software development and programming principles, as well as having a track record of consistently meeting project deadlines.

Languages: Python, Javascript, C#, SQL Database: PostgreSQL, MySQL, Redis

Frameworks: Django MVC, GraphQL, REST, React.js, Docker, jQuery, pytest, AWS, Pytorch, Numpy,

pandas, Huggingface, matplotlib, Celery

Tools: Git, Github, Bitbucket, Linux, bash, nginx,

#### **EDUCATION**

**MIAMI UNIVERSITY** 

Oxford, OH

**Master of Science in Computer Science** – GPA: 3.8

Aug 2021 - May 2023

- Courseworks: Web services, Machine learning

INSTITUTE OF ENGINEERING, PULCHOWK CAMPUS

Kathmandu, Nepal

**Bachelor's in Computer Engineering – GPA: 3.7** 

September 2012 - September 2016

- Courseworks: Software engineering, Data structure & algorithms, Object-oriented analysis and design

### **PUBLICATIONS & APPEARANCES**

- Automatically explaining a model: using deep neural networks to generate text from causal maps. Proceedings of the 2022 Winter Simulation Conference, ACM/IEEE [Link]
- Automatic text generation to explain simulations. Symposium on Natural Language Processing and Simulation, 2022, Miami University [Link]

#### **EXPERIENCE**

**Miami University** 

Oxford, OH

### **Graduate Research and Teaching Assistant**

August 2021 - Present

- Collaborated with two graduate students to publish work on Natural Language Generation from Mind Maps using Generative Pretrained Model
- Co-conceptualized and implemented HoloLens 2 application for collaborative concept map modeling

# **ToggleCorp**

Kathmandu, Nepal

## **Senior Software Developer**

July 2020 - July 2021

- Co-led an agile development of Internal Displacement Monitoring Center's (IDMC) migration tracker application [Link]
- Integrated CI/CD using Docker + Github + AWS Copilot to reduce deployment time to single clicks
- Performed Extraction and Transformation on 10,000+ legacy text-based data in several database tables to Load (ETL) into the novel system using Javascript and bash
- Created generator for automatic analytical reports using SQL queries to speed up report generation
- Created GraphQL API and error handling framework for internal developers
- Implemented automated tests using unittest and pytest

WhyUnified

Tampa, Florida, USA (Remote)

**Software Developer** 

October 2018 - December 2019

- Led development of internal Business-to-Business (B2B) platform comprising 3 micro-applications
- Conducted internal reviews and software testing and made weekly reports communicated to the CEO
- Led a team of 2 programmers and coached on development stack, coding practices, and reviews

# InfiniaHub **Software Developer**

Kathmandu, Nepal

October 2016 - September 2018

• Developed and managed eCommerce software "InfiniaStore" to allow retail stores to sell online

# **Projects**

# Collaborative concept maps modeling in Extended Reality

May 2022

• Led the development of VR application for Microsoft Hololens 2 using C# in Unity, Mixed Reality Toolkit (MRTK), and Visual Studio

## **Automated Facial Expression Recognition**

September 2016

- Implemented the feature extraction components for facial features using Gabor filters
- Used PyTorch to create CNN layers to train facial expressions recognition model and evaluate
- Transported the ML model to directly evaluate and annotate facial expression on a live video input

## **Certifications**

Computational Methods for Data Analysis AWS Fundamentals: Going Cloud-Native Machine Learning Introduction to Deep Learning Coursera, Uncertified Coursera, Credential: WXP986AVCJAR Coursera, Credential: A5XAV6Z8KHUW Coursera, Credential: WNNKGCESQEFP