# Nishil Faldu

## Available for Spring 2023 and Summer 2023

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## github.com/nishilfaldu

# **Work Experience**

#### Software Engineering Intern @ DSC

January 2022 - Present // Cincinnati, OH

- ▷ Architected and implemented an Al-powered fullstack web application, which helps user compose poetry by entering first few lines
- ▶ Proposed and implemented a scalable solution for visualization of large text datasets with THREE.js - text vectorization with BERT embeddings, categorization with LDA

## Computer Vision Research Intern @ IRAS

August 2021 - November 2021 // Cincinnati, OH

- ▷ Developed an autonomous robot that can open doors and find nearest electrical outlet to recharge
- ▷ Augmented, cleaned, processed, and labeled images with a Python script to generalize to situations in real life during door and plug localization
- ▷ Coordinated with a professor to train and fine-tune different versions of YOLO model using PyTorch and TensorFlow

# **Modeling and Simulation Intern** @ Procter and Gamble May 2021 - August 2021 // Cincinnati, OH

- ▶ Modeled and simulated one of the automatic plants of P&G with Tecnomatix Plant Simulation software increasing production by 10%
- ▷ Analyzed and visualized automated guided vehicles data through Excel charts to optimize production systems and logistical operations
- ▷ Improved logic for 52 AGVs to control their navigation, traffic management, and charging reducing congestion by 20%

## Machine Learning Intern @ DSC

January 2021 - December 2021 // Cincinnati, OH

- Developed and maintained code for cleaning and pre-processing text datasets primarily using NLTK and Gensim
- ▶ Built and deployed a Vader Sentiment, custom TensorFlow Sentiment model on AWS EC2 instance using TensorFlow Serving server and Flask application
- □ Generated embeddings of text datasets with BERT Tokenizer and applied unsupervised ML algorithms like KMeans, UMAP, PCA, TSNE

# **Involvement**

Resident Advisor @ University of Cincinnati January 2022 - Present // Cincinnati, OH

**President** @ Google Developer Student Club July 2021 - April 2022 // Cincinnati, OH

Social Media Chair @ IEEE

April 2021 - April 2022 // Cincinnati, OH

Outreach Chair @ International Partners and Leaders April 2021 - April 2022 // Cincinnati, OH

Web Developer @ RevolutionUC Hackathon September 2021 - February 2022 // Cincinnati, OH

Marketing Director @ MakeUC Hackathon

June 2021 - October 2021 // Cincinnati, OH

# **Education**

## **B.S./M.Eng.** Computer Science

Expected Graduation: April 2024

- ▷ Dual Degree Program
- ⊳ GPA 4.0/4.0
- ▶ Mantei/Mae Award, Dean's List
- ▷ International Outreach & Global Scholar

## **Skills**

### **Programming Languages**

Python, C++, JavaScript (ES6), HTML, CSS, Bash, Java, MATLAB, Octave, LabVIEW, SQL, R

#### **Libraries and Frameworks**

React, Redux, jQuery, Bootstrap, Node.js, Express, THREE.js, Flask, Django, Tensor-Flow, PyTorch, ScikitLearn, NLTK, Gensim, Numpy, Pandas, Matplotlib

#### **Tools and Platforms**

Git, AWS, Netlify, Heroku, Firebase, MongoDB, Colab, Nginx, Uwsgi

# **Projects**

## **React Dashboard**

Minimal web app for visualizing RevolutionUC Hackathon statistics. View live, yearly, and trends data on a clean dashboard for data-driven marketing

#### **Campaign Website**

Netflix-themed presidential campaign website for University of Cincinnati that lets users see platform points explained in form of videos

#### Save The Roadster

A C++ game where you "save" Elon Musk's prized Tesla Roadster from being sent into space from your Command Line Interface

#### In/Site

An Electron app that compares user-input with a "truth" database of COVID facts and states whether the input statement is true, with an embedding visualization

## **Interests**

Traveling, reading, hiking, cafe-exploring, volleyball, squash