# Charitarth Chugh

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## **EDUCATION**

## UCONN COMPUTER SCIENCE & MATHEMATICS-STATISTICS

Expected Graduation: May 2025

## **RELEVANT COURSEWORK**

Data Structures & Algorithms • Systems Programming • Cybersecurity • Data Manipulation Upcoming (Spring 2023):
Computer Architecture • Algorithms • Analysis of Experiments

## **ACTIVITIES**

## **UCONN AI CLUB**

SECRETARY: 2021 - 2023

- Al Club does workshops, showcases, and projects around deep learning.
- Responsible for planning and leading weekly meetings

## **VOLUNTEERING**

**TIME: 220+ HOURS**Volunteered at Trumbull
Public Library for their
Summer Reading Program

## SKILLS

#### **PROGRAMMING**

Python:

PyTorch • Transformers •

Plotly • Matplotlib • Pandas •

NumPy • FastAPI • SQLAlchemy

Other:

Flutter • Git • GitHub • SQLite • Linux • Docker • Podman • CI/CD

JavaScript • NodeJS • React

Familiar:

Java • Kotlin • Bash • Fish • HTML •

CSS • LATEX • OpenAPI

#### LANGUAGES

English • Hindi (Speaker) Spanish (Basic)

## LINKS

GitHub:// charitarthchugh LinkedIn:// charitarth Twitter:// @charitarthchugh Kaggle:// charitarth Medium:// @charitarth.chugh

## **PROJECTS**

#### **BOOKIE** | FULL STACK

May 2022-Current

- Creating a cross-platform bookmark manager using Fast API, SQLite & Flutter.
- Served as the Lead Developer and Project Manager in a small team
- Created CLI interface, API, daemon and was responsible for Python packaging.
- Supervised the creation of new features and encouraged standards that promote future maintainability

## **OPINIONMINING | NATURAL LANGUAGE PROCESSING**

October 2021 - Current

- Opinion Mining, also known as Aspect-based Sentiment Analysis (ABSA) is a subfield of sentiment analysis where a model detects one or more entities, aspects and opinions within a textual input.
- Created a BERT model with a custom head that better detects implicit opinion within a given input
- Working to integrate model with a rule based sentiment analysis algorithm

### **SPAM CLASSIFICATION | MACHINE LEARNING**

June 2020

 Created a 97% accurate classifier using a custom Logistic Regression model made with Numpy, Pandas, and PyTorch for the classification of pulsars in the HTRU1 dataset

## **EXO-EDA** | DATA ANALYSIS

July - August 2021

- In-depth analysis of exoplanet data from the NASA Exoplanet Archive, using Pandas, NumPy, Seaborn, and Matplotlib.
- Retrieved data using a domain-specific API
- Cleaned the data and identified potential planets that reside in the habitable zone of their host star
- Looked for relative anomalies in the data, such as planets orbiting multiple stars
- Found planets with a chance of habitability by

#### **NEATBOT | MLOPS**

June 2022

- Created a Discord Bot that detects code languages being used in a code block and replies with the correct syntax highlighting
- Deployed to Google Cloud Platform using Docker

## CERTIFICATIONS AND AWARDS

## COINDESK X TRADEBLOCK CRYPTO HACKATHON | 1ST PLACE February 2022

- With a 5-person team developed a custom momentum based algorithm that detected rises and falls within Bitcoin and Ethereum prices with a custom load factor to detect volumes of trades
- We faced problems with the data such as invalid/null values and high volatility which needed to be accounted for

**ZERO TO GANS** | CERTIFICATION, JULY 2020

**ZERO TO PANDAS** | CERTIFICATION, AUGUST 2021