

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

TEACHING

Upcoming (Spring 2023):

Deep Dive into Transformers

ACTIVITIES

UCONN AI CLUB

SECRETARY: 2021 - 2023

- AI Club does workshops, showcases, and projects around deep learning.

- Responsible for planning and leading weekly meetings

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 • AWS • GCP

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 looking at the luminosity of the star and the distance the planet was away from the star

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

BEST USE OF TWILIO | HACKUMASS 10, NOVEMBER 2022

- Built Who's There, a smart lock that uses a state-of-the-art transformers image captioning model to tell you what is happening outside of your door

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

ZERO TO GANS | CERTIFICATION, JULY 2020