Introduction to Python

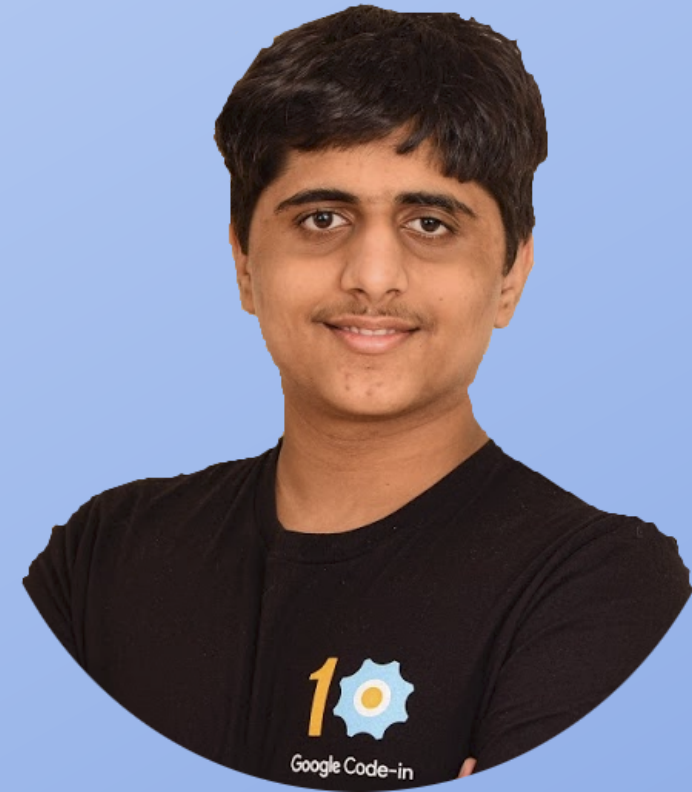## UCSAS 2022

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About Me

- **Second Year Computer Scince Student at UConn**

Interests

- Deep Learning
- Linux
- Software Development

Aspirations:

Build really cool stuff related to deep learning!

Why Python?

- Python is a language with very diverse applications
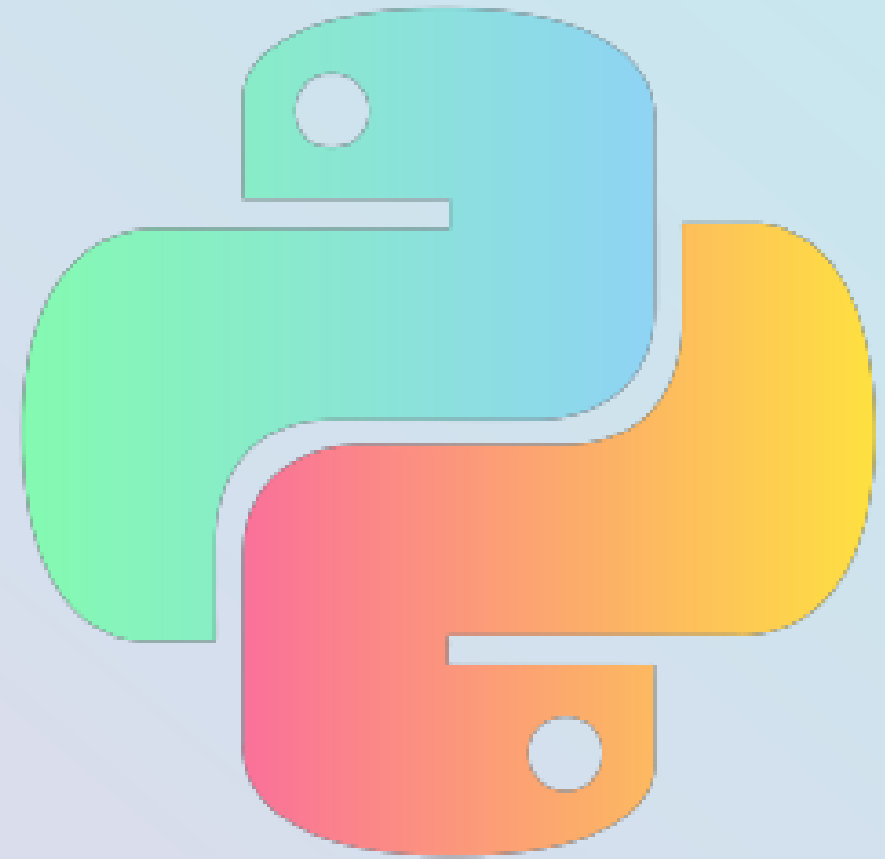
Prerequsites:

A device with Internet access and Python with Pip installed.

Getting set up:

In the terminal, run

```
pip install -U numpy pandas
matplotib seaborn
```

What we will be covering today!

- Python Syntax (Variables, Indentation, Comments)
- Data Types and Methods
  - Strings (`str`)
  - Numerical types (`int`, `float`, `complex`)
  - Mapping (`dict`)
  - Sets (`sets`, `frozenset`)
- Conditions, Loops and Functions
- Basic modules and their respective functions
  - `numpy`: Arrays, Universal Functions (Vectorized), Random numbers (Simulations)
  - `pandas`: Dataframes, Data Manipulation

Sidenote: Getting help in Python

For any class, you can call the `dir()`