Data Structures and Algorithms with Python
Acme-Tutors
Python

Instructor:	Hugh Weng	**Location:**	Zoom Meeting
Email:	tutors@acme-nyc.com	**Group Day/Time:**	Thursdays, 6:30 PM - 8:00 PM
Phone:	646-280-7089		
Start Date:	July 7, 2022		
Term:	Summer 2022		

GROUP DESCRIPTION

This group is for Data Structures and Algorithms with Python programming. This is a rigorous introduction to basic functional and object oriented programming paradigms in Python and algorithmic problem sets with data structures.

GROUP OBJECTIVES

- To build understanding of algorithms and data structures in Python.
- To develop an adequate working knowledge to be able to code algorithms and data structures in Python.
- Understand the syntax and semantics of the langauge.
- Engage in active discussions.
- Build algorithms in Python.

PREREQUISITES

Prior experience with Python. Any prior experience with another programming language is a plus.

TEXTBOOK: *Data Structures and Algorithms with Python*, Springer, 2015

TENTATIVE SCHEDULE

Week	Description
1	Python Programming 101
2	Computational Complexity
3	Recursion
4	Sequence
5	Sets and Maps
6	Trees
7	Graphs
8	Membership Structures
9	Heaps
10	Balanced Binary Trees
11	B-Trees
12	Heuristic Search