

Advanced Python -- 高级 Python

About this course 关于本课

This course is for young people (age 10 to 17) who have already taken 3001: Computer Science: Beginner Python. It covers relatively advanced concepts like numeric computing, data visualization and Python web programming. Attention: This course consists of two semesters: Fall and Spring semester. As a result, fall semester and spring semester cover different contents.

Words from Lecturer:

My name is Max Li (李海飞). I have taught college students for many years (17 to be exact). I also have industrial experiences for 6 years before coming to US for graduate studies. In addition, I have been a researcher at IBM Thomas J. Watson Research Center for 2 years. I got a doctoral degree from the University of Florida (2001), a master's degree from the University of Florida (1998) and a bachelor's degree from Xi'an Jiaotong University (1990). All my degrees are in computer science and engineering.

VERY important requirement:

A windows 10 laptop with wireless access is required for the course. Please bring the laptop to the classroom every time because every student needs to use his/her own computer for working with the code.

Fall semester

fundamental of numeric computing

SciPy

NumPy

Pandas

Matplotlib

SNS

Spring Semester

Python web development frameworks

Django vs. Flask

Heroku

Web programming using Flask

- Flask basics
- templates
- learn how to create and connect to a database
- Flask-SQLAlchemy
- Flask-Bootstrap
- Flask-Babel