

**Changsha University of Science and Technology**

School of Computer and Communications Engineering Experiment Course for Python Programming

# Course Name: Python Programming Grade: 2021 Fall Major: Computer Science and Technology

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# Date: 28/04/2024

**用Python爬取比特币每天的交易数据，绘制K线和均线并用机器学习预测比特币价格走势，以日线为依据预测。**

**第一步：通过pandas\_datareader库的方法爬取比特币日线数据**

**第二步：用matplotlib绘制k线和均线**

**第三步：用sklearn库的机器学习方法预测股票后市价格**

**英文版：**

**Use Python to crawl Bitcoin's daily transaction data (at least 200 day’s transaction data, including opening price, closing price, highest price, lowest price, trading volume), draw K-lines and moving averages, and use machine learning to predict Bitcoin price trends based on daily lines. (accounts for 60 points)**

**Step 1: Crawling Bitcoin daily data through the method of pandas\_datareader library**

**Step 2: Use matplotlib to draw k-lines and moving averages**

**Step 3: Use the machine learning method of the sklearn library to predict the future stock price**

**Checking points:**

**1. Results (40 points)**

**2. Explanations (60 points)**





