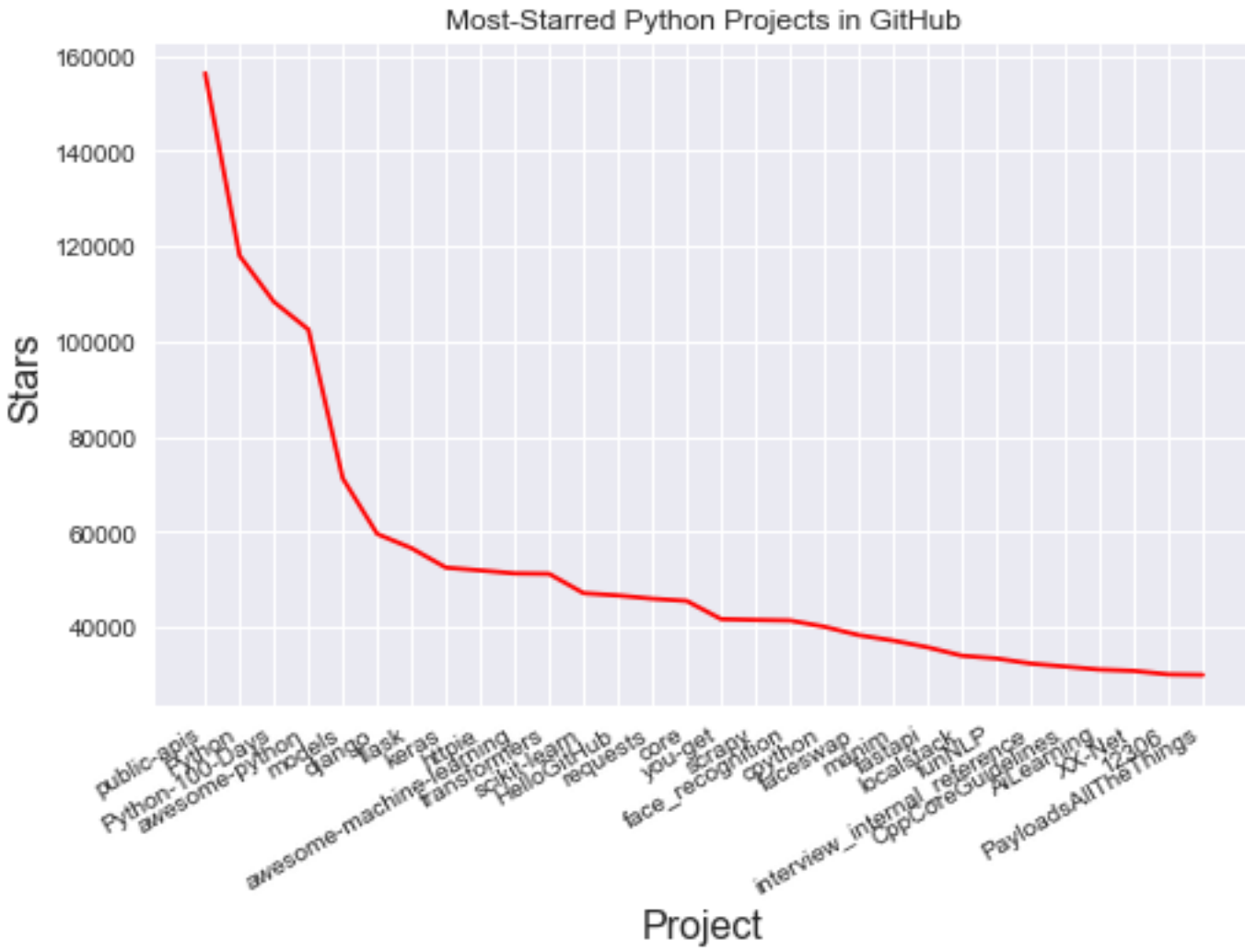
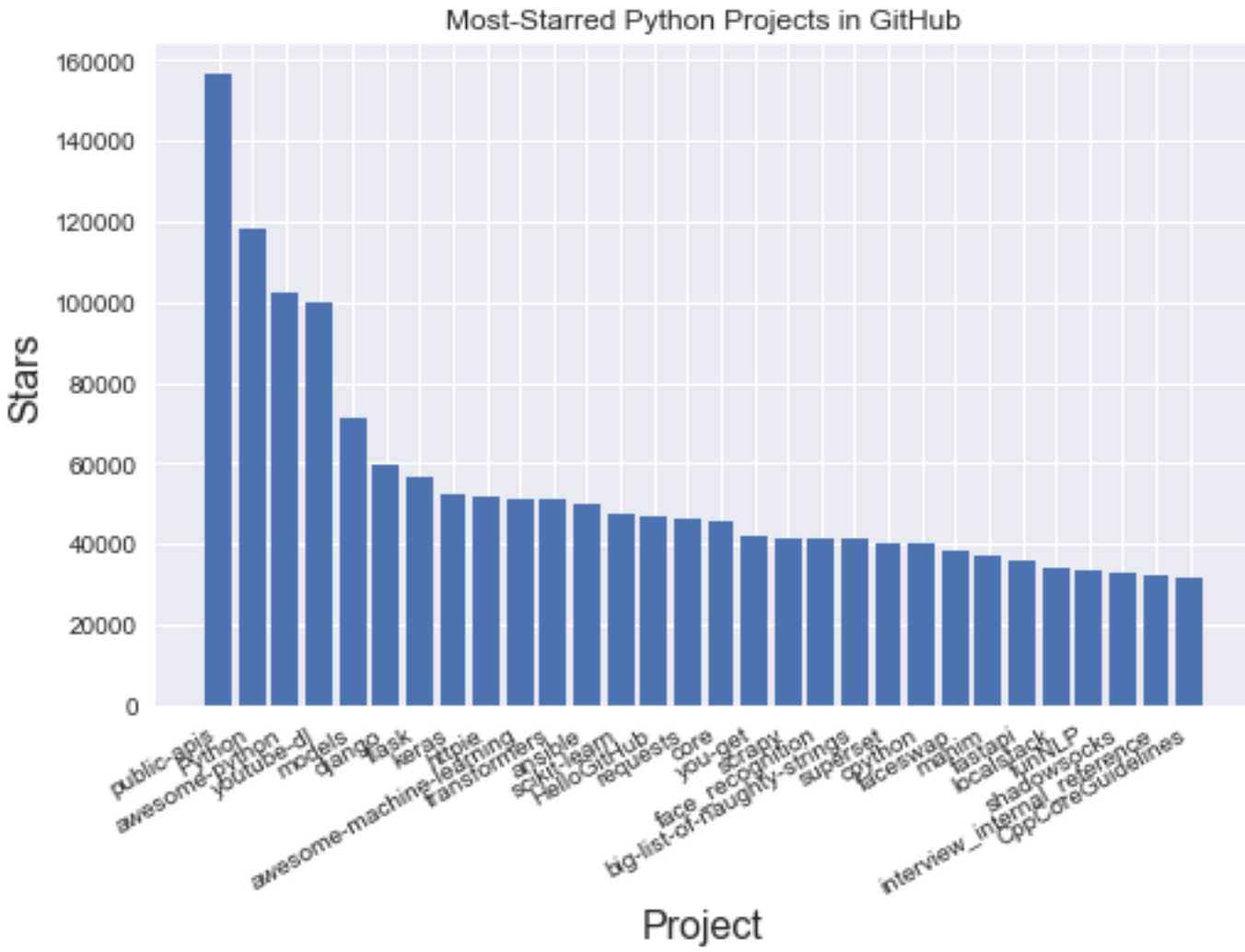
Тема 2.3.2. Визуализация данных, полученных в результате вызова API

```
#Создание вызова API и сохранение ответа
url = 'https://api.github.com/search/repositories?q = language:python&sort = stars'
headers = {'Accept':'application/vnd.github.v3+json'}
r = requests.get(url,headers = headers)
print(f"Status code:{r.status_code}")  # Status code:200

# Сохранение ответа API в переменной response_dict
response_dict = r.json()
repo_dicts = response_dict['items']
print(f"Repositories returned:{len(repo_dicts)}")

# Формирование массивов данных для визуализации (массивы repo_names, stars)
repo_names,stars = [], []
for repo_dict in repo_dicts:
    repo_names.append(repo_dict['name'])
    stars.append(repo_dict['stargazers_count'])

# визуализация с помощью Plotly
import plotly
import plotlywidget
from plotly.graph_objs import bar
from plotly import offline
…
data = [{
```

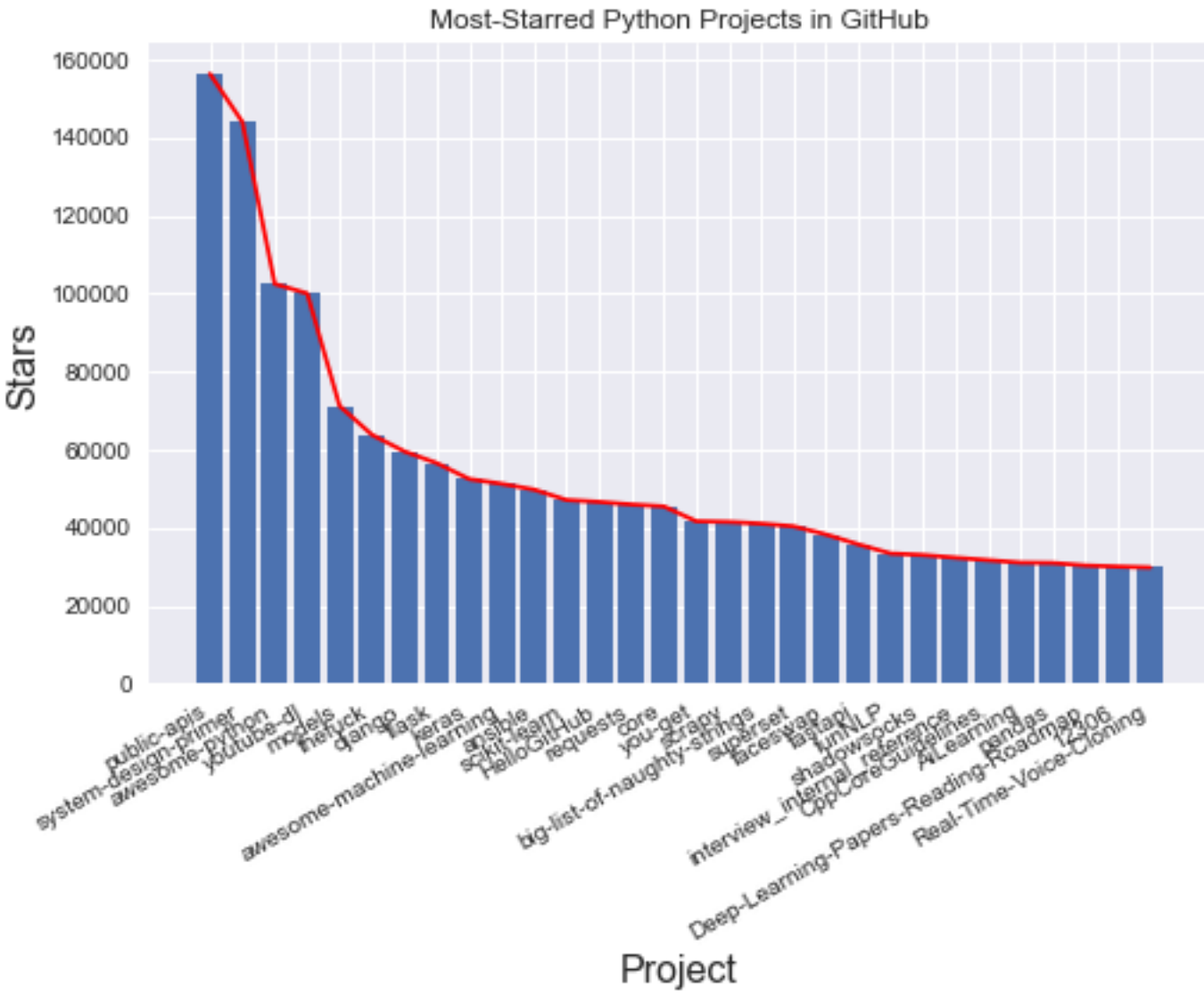
```
    'type':'bar',
    'x':repo_names,
    'y':stars,
}]
my_layout = {
  'title':'Most-Starred Python Projects jn GitHub',
  'xaxis':{'title':'Repository'},
  'yaxis':{'title':'Stars'},
}
fig = {'data':data, 'layout':my_layout}
offline.plot(fig,filename = 'python_repos.html')

# визуализация с помощью Matplotlib
from matplotlib import pyplot as plt
…
plt.style.use('seaborn')
fig,ax = plt.subplots()
ax.plot(repo_names, stars, c = 'red')
plt.title('Most-Starred Python Projects in GitHub')
plt.xlabel('Project', fontsize = 16)
plt.ylabel('Stars', fontsize = 16)
fig.autofmt_xdate()
```



plt.bar(repo_names, stars)




```
ax.plot(repo_names, stars, c = 'red')

plt.bar(repo_names, stars)
```


Most-Starred Python Projects in GitHub
Stars
160000
140000
120000
100000
80000
60000
40000
20000
0
public-apis
system-design-primer
awesome-python
youtube-dl
models
thefuck
django
flask
keras
awesome-machine-learning
ansible
scikit-learn
HelloGitHub
requests
core
you-get
scrapy
big-list-of-naughty-strings
superset
faceswap
fastapi
funNLP
shadowsocks
interview_internal_reference
CppCoreGuidelines
ML-learning
pandas
Deep-Learning-Papers-Reading-Roadmap
12306
Real-Time-Voice-Cloning
Project