

Introduction

In today's rapidly evolving tech field, Python has emerged as a well sorted language, driving innovation across industries worldwide. Recognizing the significance of Python proficiency, this project delves into the job market landscape in the Middle East, specifically focusing on Python-related roles. By scraping job listings from Wuzzuf, a prominent online job portal, I aim to gain insights into the demand for Python talent, the diversity of job opportunities, and the geographical distribution of these roles across the region.

Importing Libraries

```
In [1]: import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
import requests
from bs4 import BeautifulSoup
import csv
from itertools import zip_longest

In [2]: #using requests to fetch the url
result =requests.get('https://wuzzuf.net/search/jobs/?q=python&a=hpb')

In [3]: #save page content
src =result.content

In [4]: ##creating soup object to parse content

soup =BeautifulSoup(src,'lxml')

In [5]: job_titles = soup.find_all("h2", {"class": "css-m604qf"})
company_name = soup.find_all("a", {"class": "css-17s97q8"})
location = soup.find_all("span", {"class": "css-5wys0k"})
job_skills = soup.find_all("div", {"class": "css-y4udm8"})

In [6]: #creating empty lists to house the scrapped data
job_title_list = []
company_name_list = []
location_list = []
job_skills_list = []
```

```
In [7]: for i in range(len(location)):
    job_title_list.append(job_titles[i].text)
    company_name_list.append(company_name[i].text)
    location_list.append(location[i].text)
    job_skills_list.append(job_skills[i].text)
```

```
In [8]: #defining the path of the csv file:

file_path = "C:\\\\Users\\\\Nana Ekua\\\\Desktop\\\\TECH4DEV\\\\jobs_scraped_data.csv"

# all the features:
file_list = [job_title_list, company_name_list, location_list, job_skills_list]
exported = zip_longest(*file_list)

with open(file_path, "w", newline= '', encoding= "utf-8") as csvfile:

    # creating a csv writer object to write in the file
    csv_writer = csv.writer(csvfile)

    # # writing data to the csv file
    csv_writer.writerow(["job title", "company name", "location", "skills"])
    csv_writer.writerows(exported)
```

```
In [9]: #reading my data

df=pd.read_csv("C:\\\\Users\\\\Nana Ekua\\\\Desktop\\\\TECH4DEV\\\\jobs_scraped_data.csv" )
df
```

Out[9]:

	job title	company name	location	skills
0	Senior python backend developer	Pioneers Now -	Nasr City, Cairo, Egypt	Full TimeHybridExperienced · 3 - 5 Yrs of Exp ...
1	Python Developer	Digizilla -	Nasr City, Cairo, Egypt	Full TimeHybridEntry Level · 0 - 3 Yrs of Exp ...
2	Python Developer	Ensofia -	Heliopolis, Cairo, Egypt	Full TimeRemoteExperienced · 4 - 6 Yrs of Exp ...
3	Python Backend Developer	Geek Labs -	Maadi, Cairo, Egypt	Full TimeOn-siteEntry Level · 2+ Yrs of Exp · ...
4	AI & Data Science Python Developer Intern	Sequel Solutions -	Cairo, Egypt	InternshipRemoteStudent · 0 - 1 Yrs of Exp · I...
5	Python Backend Developer Internship	Geek Labs -	Maadi, Cairo, Egypt	InternshipOn-siteEntry Level · IT/Software Dev...
6	Senior Python Developer	Trufla -	Cairo, Egypt	Full TimeHybridExperienced · 4+ Yrs of Exp · I...
7	Python Developer	Confidential -	Cairo, Egypt	Full TimeOn-siteExperienced · 4 - 6 Yrs of Exp...
8	Senior Software Engineer- Team Lead	JRM for Communications -	Nasr City, Cairo, Egypt	Full TimeHybridExperienced · 4 - 6 Yrs of Exp ...
9	Machine Learning Researcher	RDI -	Dokki, Giza, Egypt	Full TimeHybridEntry Level · 0 - 3 Yrs of Exp ...
10	Odoo Developer	Cube Master -	Al Ahsa, Saudi Arabia	Full TimeRemoteExperienced · 2+ Yrs of Exp · I...
11	Machine Learning Engineer	HackerPulse -	Riyadh, Saudi Arabia	Full TimeRemoteEntry Level · 1 - 3 Yrs of Exp ...
12	AI Engineer Lead	Block Gemini -	Cairo, Egypt	Full TimeOn-siteExperienced · 6 - 10 Yrs of Ex...
13	Senior Data Architect	APS Resources -	Giza, Egypt	Part TimeFreelance / ProjectRemoteExperienced ...
14	Odoo Developer	Smart Line -	Nasr City, Cairo, Egypt	Full TimeOn-siteExperienced · 1 - 3 Yrs of Exp...

In [10]: df.shape

Out[10]: (15, 4)

Data Cleaning

In [11]: import re

```
data = {
    'title': [
        "Senior python backend developer", "Python Developer", "Python Developer",
        "Python Backend Developer", "AI & Data Science Python Developer Intern",
        "Python Backend Developer Internship", "Senior Python Developer", "Python Developer",
```

```

        "Senior Software Engineer- Team Lead", "Machine Learning Researcher", "Odoo Developer",
        "Senior Data Architect", "Machine Learning Engineer", "AI Engineer Lead", "Odoo Developer"
    ],
    'company name': [
        "Pioneers Now -", "Digizilla -", "Ensofia -", "Geek Labs -", "Sequel Solutions -",
        "Geek Labs -", "Trufla -", "Confidential -", "JRM for Communications -", "RDI -",
        "Cube Master -", "APS Resources -", "HackerPulse -", "Block Gemini -", "Smart Line -"
    ],
    'location': [
        "Nasr City, Cairo, Egypt", "Nasr City, Cairo, Egypt", "Heliopolis, Cairo, Egypt",
        "Maadi, Cairo, Egypt", "Cairo, Egypt", "Maadi, Cairo, Egypt", "Cairo, Egypt",
        "Cairo, Egypt", "Nasr City, Cairo, Egypt", "Dokki, Giza, Egypt", "Al Ahsa, Saudi Arabia",
        "Giza, Egypt", "Riyadh, Saudi Arabia", "Cairo, Egypt", "Nasr City, Cairo, Egypt"
    ],
    'skills': [
        "Full TimeHybridExperienced · 3 - 5 Yrs of Exp · Business Development · IT/Software Development · Marketing/PR/Adver",
        "Full TimeHybridEntry Level · 0 - 3 Yrs of Exp · Business Development · IT/Software Development · Marketing/PR/Adver",
        "Full TimeRemoteExperienced · 4 - 6 Yrs of Exp · Business Development · IT/Software Development · Marketing/PR/Adver",
        "Full TimeOn-siteEntry Level · 2+ Yrs of Exp · Business Development · IT/Software Development · Marketing/PR/Adver",
        "InternshipRemoteStudent · 0 - 1 Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend · Softwa",
        "InternshipOn-siteEntry Level · IT/Software Development · Marketing/PR/Advertising · backend · Software · Softwa",
        "Full TimeHybridExperienced · 4+ Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend · Softwa",
        "Full TimeOn-siteExperienced · 4 - 6 Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend",
        "Full TimeHybridExperienced · 4 - 6 Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend",
        "Full TimeHybridEntry Level · 0 - 3 Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend",
        "Full TimeRemoteExperienced · 2+ Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend · Softwa",
        "Part TimeFreelance / ProjectRemoteExperienced · IT/Software Development · Marketing/PR/Advertising · backend",
        "Full TimeRemoteEntry Level · 1 - 3 Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend",
        "Full TimeOn-siteExperienced · 6 - 10 Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend",
        "Full TimeOn-siteExperienced · 1 - 3 Yrs of Exp · IT/Software Development · Marketing/PR/Advertising · backend"
    ]
}
}

# Create DataFrame
df = pd.DataFrame(data)

# Function to clean and split the skills column
def clean_and_split_skills(row):
    # Extract Time Type (Full Time, Part Time, etc.)
    time_type = re.search(r'(Full Time|Part Time|Freelance|Internship)', row, re.IGNORECASE)
    time_type = time_type.group(0) if time_type else None

    # Extract Job Type
    job_type = []
    if 'Remote' in row:

```

```

        job_type.append('Remote')
    if 'Hybrid' in row:
        job_type.append('Hybrid')
    if 'On-site' in row:
        job_type.append('On-site')
    if 'Freelance' in row:
        job_type.append('Freelance')
    job_type = ', '.join(job_type) if job_type else None

    # Extract Experience Level
    experience_level = []
    if 'Experienced' in row:
        experience_level.append('Experienced')
    if 'Entry Level' in row:
        experience_level.append('Entry Level')
    if 'Student' in row:
        experience_level.append('Student')
    experience_level = ', '.join(experience_level) if experience_level else None

    # Extract Years of Experience
    years_of_exp = re.search(r'(\d+\s*-|\s*\d+\s*Yrs of Exp|\d+\+\s*Yrs of Exp)', row)
    years_of_exp = years_of_exp.group(0) if years_of_exp else None

    # Extract Skills
    skills = re.split(r'\s+', row)
    # Remove known items from skills list
    skills = [skill for skill in skills if not re.search(r'(Full Time|Part Time|Freelance|Internship|Remote|Hybrid|On-s', skill)]
    skills = ' '.join(skills).strip()

    return pd.Series([time_type, job_type, experience_level, years_of_exp, skills])

# Apply function to each row in the skills column
df[['Engagement Time', 'Job Type', 'Experience Level', 'Years of Experience', 'Skills']] = df['skills'].apply(clean_and)

# Drop the original skills column
df.drop(columns=['skills'], inplace=True)

# Print the cleaned DataFrame
print(df)

```

		title	company name \
0	Senior python backend developer	Pioneers Now -	
1	Python Developer	Digizilla -	
2	Python Developer	Ensofia -	
3	Python Backend Developer	Geek Labs -	
4	AI & Data Science Python Developer Intern	Sequel Solutions -	
5	Python Backend Developer Internship	Geek Labs -	
6	Senior Python Developer	Trufla -	
7	Python Developer	Confidential -	
8	Senior Software Engineer- Team Lead	JRM for Communications -	
9	Machine Learning Researcher	RDI -	
10	Odoo Developer	Cube Master -	
11	Senior Data Architect	APS Resources -	
12	Machine Learning Engineer	HackerPulse -	
13	AI Engineer Lead	Block Gemini -	
14	Odoo Developer	Smart Line -	

	location	Engagement	Time	Job Type \
0	Nasr City, Cairo, Egypt	Full Time		Hybrid
1	Nasr City, Cairo, Egypt	Full Time		Hybrid
2	Heliopolis, Cairo, Egypt	Full Time		Remote
3	Maadi, Cairo, Egypt	Full Time		On-site
4	Cairo, Egypt	Internship		Remote
5	Maadi, Cairo, Egypt	Internship		On-site
6	Cairo, Egypt	Full Time		Hybrid
7	Cairo, Egypt	Full Time		On-site
8	Nasr City, Cairo, Egypt	Full Time		Hybrid
9	Dokki, Giza, Egypt	Full Time		Hybrid
10	Al Ahsa, Saudi Arabia	Full Time		Remote
11	Giza, Egypt	Part Time	Remote, Freelance	
12	Riyadh, Saudi Arabia	Full Time		Remote
13	Cairo, Egypt	Full Time		On-site
14	Nasr City, Cairo, Egypt	Full Time		On-site

	Experience Level	Years of Experience	Skills
0	Experienced	3 - 5 Yrs of Exp	
1	Entry Level	0 - 3 Yrs of Exp	
2	Experienced	4 - 6 Yrs of Exp	
3	Entry Level	2+ Yrs of Exp	
4	Student	0 - 1 Yrs of Exp	
5	Entry Level	None	
6	Experienced	4+ Yrs of Exp	
7	Experienced	4 - 6 Yrs of Exp	
8	Experienced	4 - 6 Yrs of Exp	
9	Entry Level	0 - 3 Yrs of Exp	

```
10    Experienced      2+ Yrs of Exp
11    Experienced      None
12    Entry Level      1 - 3 Yrs of Exp
13    Experienced      6 - 10 Yrs of Exp
14    Experienced      1 - 3 Yrs of Exp
```

```
In [12]: df
```

Out[12]:

	title	company name	location	Engagement Time	Job Type	Experience Level	Years of Experience	Skills
0	Senior python backend developer	Pioneers Now -	Nasr City, Cairo, Egypt	Full Time	Hybrid	Experienced	3 - 5 Yrs of Exp	
1	Python Developer	Digizilla -	Nasr City, Cairo, Egypt	Full Time	Hybrid	Entry Level	0 - 3 Yrs of Exp	
2	Python Developer	Ensofia -	Heliopolis, Cairo, Egypt	Full Time	Remote	Experienced	4 - 6 Yrs of Exp	
3	Python Backend Developer	Geek Labs -	Maadi, Cairo, Egypt	Full Time	On-site	Entry Level	2+ Yrs of Exp	
4	AI & Data Science Python Developer Intern	Sequel Solutions -	Cairo, Egypt	Internship	Remote	Student	0 - 1 Yrs of Exp	
5	Python Backend Developer Internship	Geek Labs -	Maadi, Cairo, Egypt	Internship	On-site	Entry Level		None
6	Senior Python Developer	Trufla -	Cairo, Egypt	Full Time	Hybrid	Experienced	4+ Yrs of Exp	
7	Python Developer	Confidential -	Cairo, Egypt	Full Time	On-site	Experienced	4 - 6 Yrs of Exp	
8	Senior Software Engineer-Team Lead	JRM for Communications -	Nasr City, Cairo, Egypt	Full Time	Hybrid	Experienced	4 - 6 Yrs of Exp	
9	Machine Learning Researcher	RDI -	Dokki, Giza, Egypt	Full Time	Hybrid	Entry Level	0 - 3 Yrs of Exp	
10	Odoo Developer	Cube Master -	Al Ahsa, Saudi Arabia	Full Time	Remote	Experienced	2+ Yrs of Exp	
11	Senior Data Architect	APS Resources -	Giza, Egypt	Part Time	Remote, Freelance	Experienced		None
12	Machine Learning Engineer	HackerPulse -	Riyadh, Saudi Arabia	Full Time	Remote	Entry Level	1 - 3 Yrs of Exp	
13	AI Engineer Lead	Block Gemini -	Cairo, Egypt	Full Time	On-site	Experienced	6 - 10 Yrs of Exp	
14	Odoo Developer	Smart Line -	Nasr City, Cairo, Egypt	Full Time	On-site	Experienced	1 - 3 Yrs of Exp	

In [13]: `df['company name'] = df['company name'].str.replace(r'\s*-\s*$', ' ', regex=True)`

```
In [14]: df['Years of Experience'] = df['Years of Experience'].str.replace(' Yrs of Exp', ' Yrs')
```

```
In [15]: df
```

Out[15]:

	title	company name	location	Engagement Time	Job Type	Experience Level	Years of Experience	Skills
0	Senior python backend developer	Pioneers Now	Nasr City, Cairo, Egypt	Full Time	Hybrid	Experienced	3 - 5 Yrs	
1	Python Developer	Digizilla	Nasr City, Cairo, Egypt	Full Time	Hybrid	Entry Level	0 - 3 Yrs	
2	Python Developer	Ensofia	Heliopolis, Cairo, Egypt	Full Time	Remote	Experienced	4 - 6 Yrs	
3	Python Backend Developer	Geek Labs	Maadi, Cairo, Egypt	Full Time	On-site	Entry Level	2+ Yrs	
4	AI & Data Science Python Developer Intern	Sequel Solutions	Cairo, Egypt	Internship	Remote	Student	0 - 1 Yrs	
5	Python Backend Developer Internship	Geek Labs	Maadi, Cairo, Egypt	Internship	On-site	Entry Level	None	
6	Senior Python Developer	Trufla	Cairo, Egypt	Full Time	Hybrid	Experienced	4+ Yrs	
7	Python Developer	Confidential	Cairo, Egypt	Full Time	On-site	Experienced	4 - 6 Yrs	
8	Senior Software Engineer-Team Lead	JRM for Communications	Nasr City, Cairo, Egypt	Full Time	Hybrid	Experienced	4 - 6 Yrs	
9	Machine Learning Researcher	RDI	Dokki, Giza, Egypt	Full Time	Hybrid	Entry Level	0 - 3 Yrs	
10	Odoo Developer	Cube Master	Al Ahsa, Saudi Arabia	Full Time	Remote	Experienced	2+ Yrs	
11	Senior Data Architect	APS Resources	Giza, Egypt	Part Time	Remote, Freelance	Experienced	None	
12	Machine Learning Engineer	HackerPulse	Riyadh, Saudi Arabia	Full Time	Remote	Entry Level	1 - 3 Yrs	
13	AI Engineer Lead	Block Gemini	Cairo, Egypt	Full Time	On-site	Experienced	6 - 10 Yrs	
14	Odoo Developer	Smart Line	Nasr City, Cairo, Egypt	Full Time	On-site	Experienced	1 - 3 Yrs	

In [16]: `df.drop(columns=['Skills'], inplace=True)`

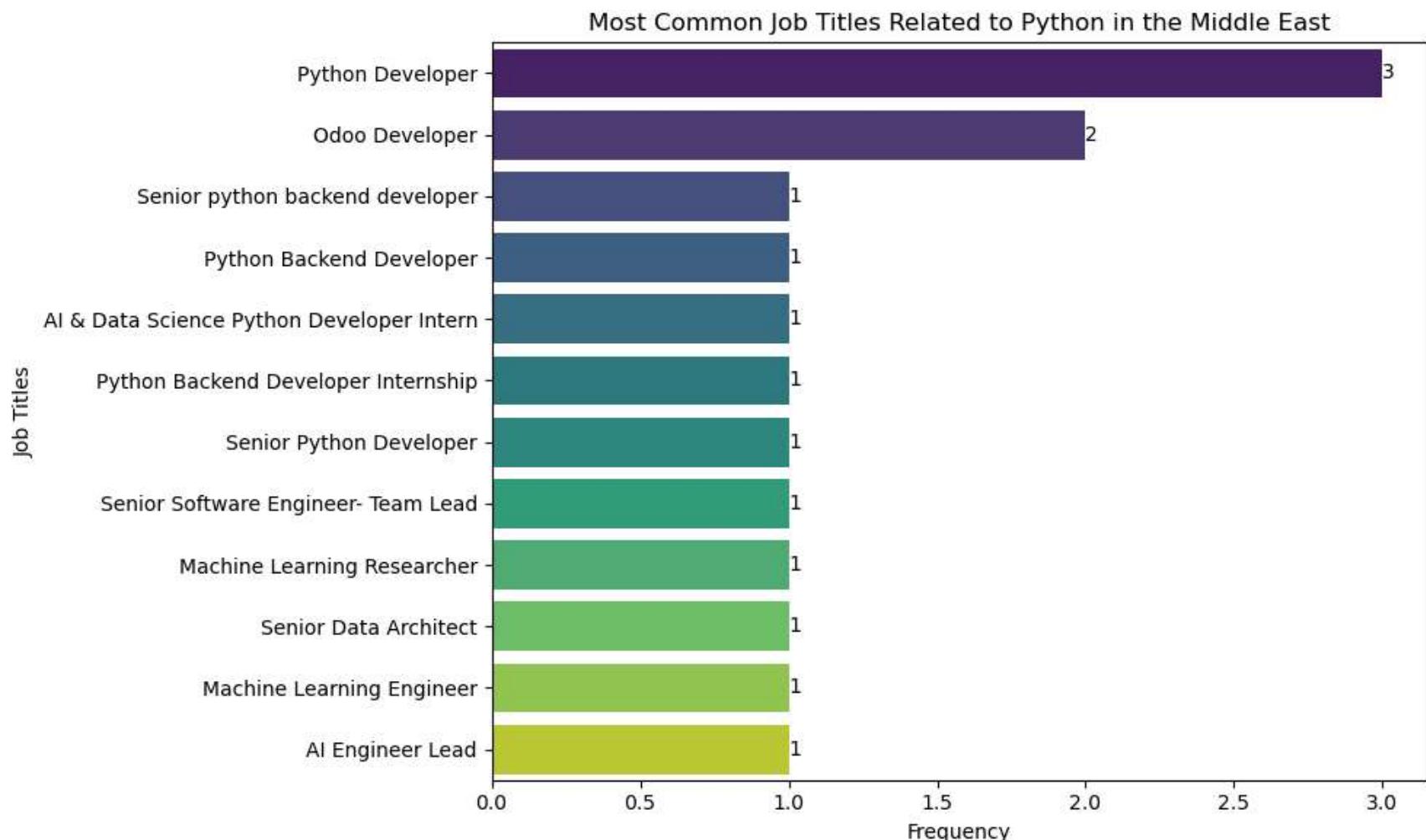
Exploratory Data Analysis

```
In [17]: job_title_counts = df['title'].value_counts().reset_index()
job_title_counts.columns = ['title', 'count']

# Plotting
plt.figure(figsize=(10, 6))
ax = sns.barplot(data=job_title_counts, x='count', y='title', palette='viridis')

# Adding data labels
for container in ax.containers:
    ax.bar_label(container)

plt.title('Most Common Job Titles Related to Python in the Middle East')
plt.xlabel('Frequency')
plt.ylabel('Job Titles')
plt.tight_layout()
plt.show()
```



From the chart above , we can notice that "Python Developer" is the most sort after job description or title in the on the Wuzzuf platform.

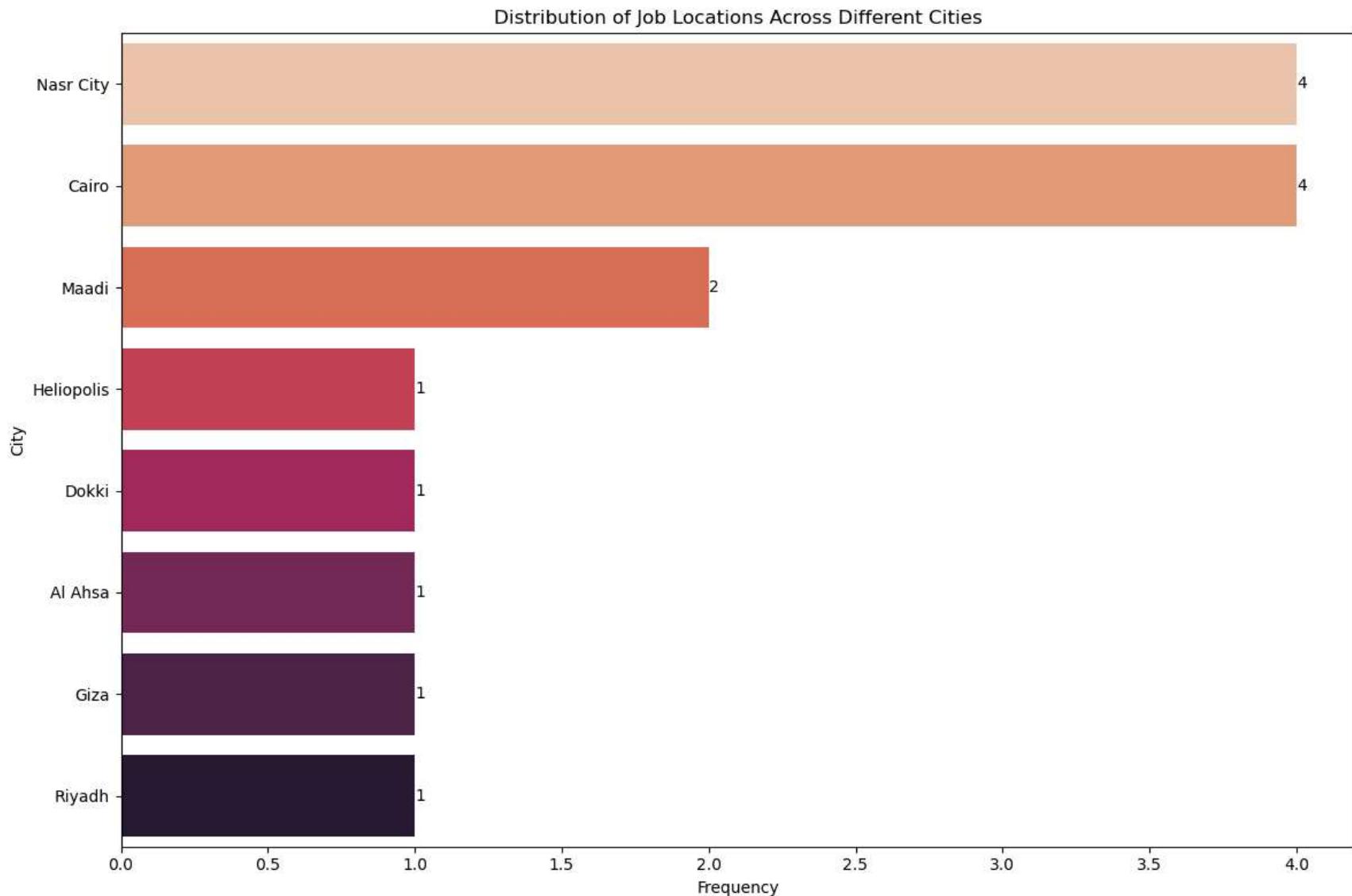
```
In [18]: df['city'] = df['location'].apply(lambda x: x.split(',')[0])

# Count the frequency of each city
city_counts = df['city'].value_counts().reset_index()
city_counts.columns = ['city', 'count']

# Plotting
plt.figure(figsize=(12, 8))
ax = sns.barplot(data=city_counts, x='count', y='city', palette='rocket_r')
```

```
# Adding data labels
for container in ax.containers:
    ax.bar_label(container)

plt.title('Distribution of Job Locations Across Different Cities')
plt.xlabel('Frequency')
plt.ylabel('City')
plt.tight_layout()
plt.show()
```

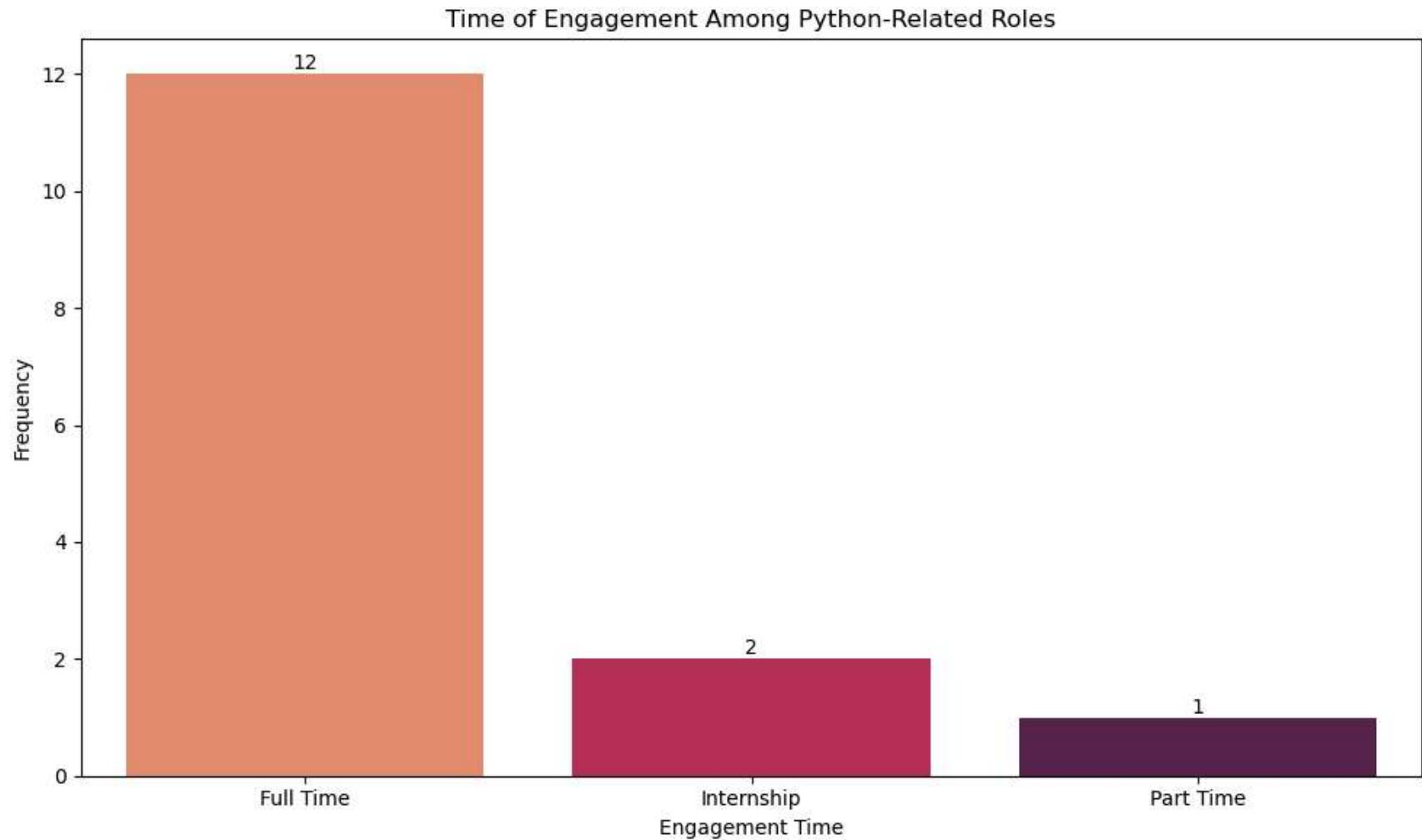


Notably Nasr City and Cairo has the highest number of job listings.

```
In [19]: job_type_counts = df['Engagement Time'].value_counts().reset_index()
job_type_counts.columns = ['Engagement Time', 'count']

plt.figure(figsize=(10, 6))
ax = sns.barplot(data=job_type_counts, x='Engagement Time', y='count', palette='rocket_r')
```

```
for container in ax.containers:  
    ax.bar_label(container)  
  
plt.title('Time of Engagement Among Python-Related Roles')  
plt.xlabel('Engagement Time')  
plt.ylabel('Frequency')  
plt.tight_layout()  
plt.show()
```



Most of the jobs are Full time jobs

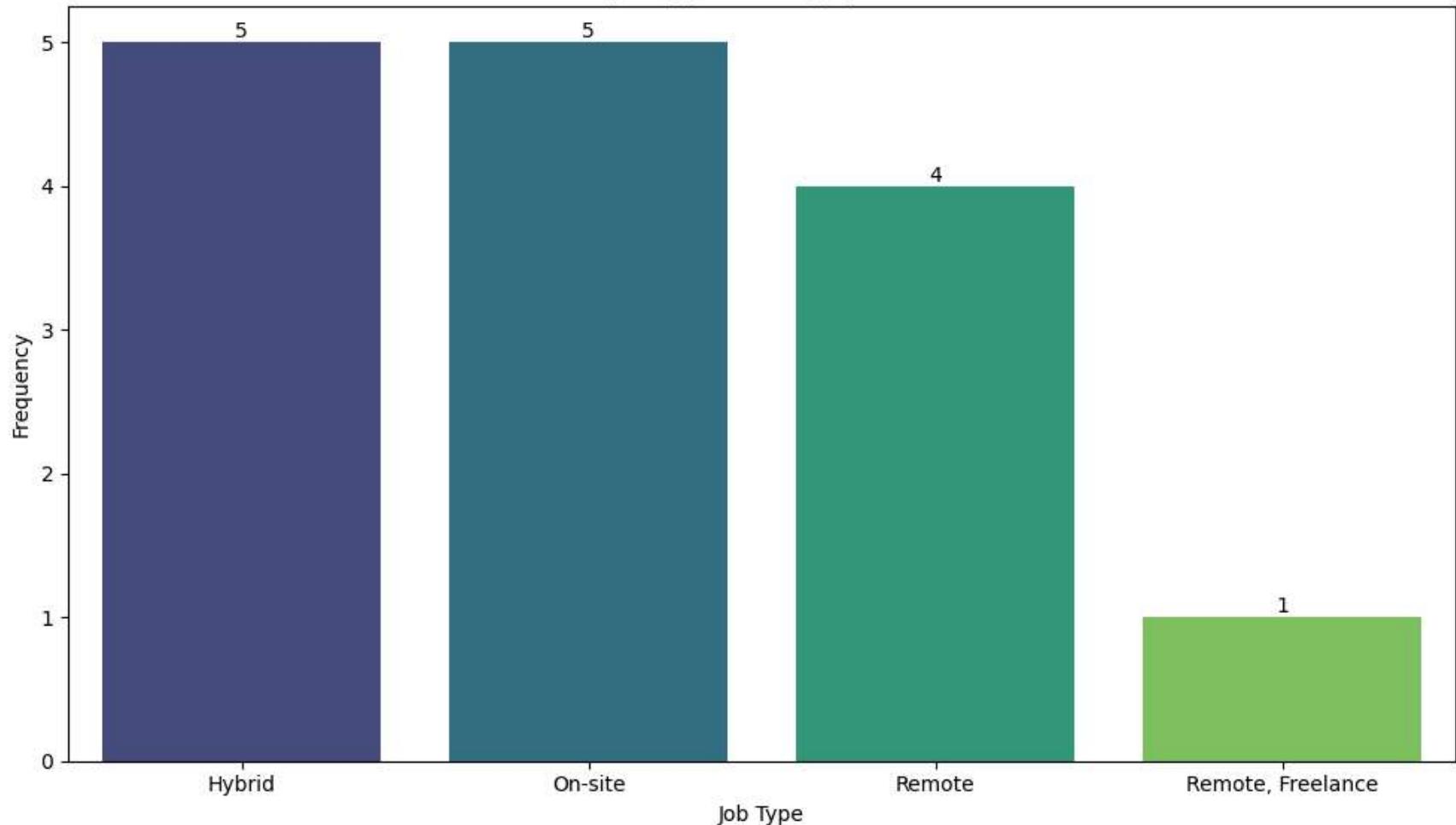
```
In [20]: job_type_counts = df['Job Type'].value_counts().reset_index()
job_type_counts.columns = ['Job Type', 'count']

# Plotting
plt.figure(figsize=(10, 6))
ax = sns.barplot(data=job_type_counts, x='Job Type', y='count', palette='viridis')

# Adding data labels
for container in ax.containers:
    ax.bar_label(container)

plt.title('Distribution of Job Types Among Python-Related Roles')
plt.xlabel('Job Type')
plt.ylabel('Frequency')
plt.tight_layout()
plt.show()
```

Distribution of Job Types Among Python-Related Roles



Most of the jobs are either hybrid or require the prospective job seeker to be on-site

```
In [23]: data = {
    'title': [
        'Senior python backend developer', 'Python Developer', 'Python Developer', 'Python Backend Developer',
        'AI & Data Science Python Developer Intern', 'Python Backend Developer Internship', 'Senior Python Developer',
        'Python Developer', 'Senior Software Engineer- Team Lead', 'Machine Learning Researcher', 'Odoo Developer',
        'Senior Data Architect', 'Machine Learning Engineer', 'AI Engineer Lead', 'Odoo Developer'
    ],
    'company name': [
        'Pioneers Now', 'Digizilla', 'Ensofia', 'Geek Labs', 'Sequel Solutions', 'Geek Labs', 'Trufla',
        'Confidential', 'JRM for Communications', 'RDI', 'Cube Master', 'APS Resources', 'HackerPulse',
    ]
}
```

```

        'Block Gemini', 'Smart Line'
    ],
    'location': [
        'Nasr City, Cairo, Egypt', 'Nasr City, Cairo, Egypt', 'Heliopolis, Cairo, Egypt', 'Maadi, Cairo, Egypt', 'Cairo
        'Maadi, Cairo, Egypt', 'Cairo, Egypt', 'Cairo, Egypt', 'Nasr City, Cairo, Egypt', 'Dokki, Giza, Egypt',
        'Al Ahsa, Saudi Arabia', 'Giza, Egypt', 'Riyadh, Saudi Arabia', 'Cairo, Egypt', 'Nasr City, Cairo, Egypt'
    ],
    'Engagement Time': [
        'Full Time', 'Full Time', 'Full Time', 'Full Time', 'Internship', 'Internship', 'Full Time',
        'Full Time', 'Full Time', 'Full Time', 'Part Time', 'Full Time', 'Full Time',
        'Full Time'
    ],
    'Job Type': [
        'Hybrid', 'Hybrid', 'Remote', 'On-site', 'Remote', 'On-site', 'Hybrid', 'On-site', 'Hybrid', 'Hybrid',
        'Remote', 'Remote, Freelance', 'Remote', 'On-site', 'On-site'
    ],
    'Experience Level': [
        'Experienced', 'Entry Level', 'Experienced', 'Entry Level', 'Student', 'Entry Level',
        'Experienced', 'Experienced', 'Experienced', 'Entry Level', 'Experienced', 'Experienced',
        'Entry Level', 'Experienced', 'Experienced'
    ],
    'Years of Experience': [
        '3 - 5 Yrs', '0 - 3 Yrs', '4 - 6 Yrs', '2+ Yrs', '0 - 1 Yrs', '0 - 0 Yrs', '4+ Yrs',
        '4 - 6 Yrs', '4 - 6 Yrs', '0 - 3 Yrs', '2+ Yrs', '0 - 0 Yrs', '1 - 3 Yrs', '6 - 10 Yrs',
        '1 - 3 Yrs'
    ],
    'city': [
        'Nasr City', 'Nasr City', 'Heliopolis', 'Maadi', 'Cairo', 'Maadi', 'Cairo', 'Cairo',
        'Nasr City', 'Dokki', 'Al Ahsa', 'Giza', 'Riyadh', 'Cairo', 'Nasr City'
    ]
}
}

df = pd.DataFrame(data)

# Helper function to convert "Years of Experience" to a numerical value
def convert_experience(exp):
    if pd.isna(exp) or exp == '0 - 0 Yrs':
        return 0
    elif '+' in exp:
        return float(exp.replace('+ Yrs', ''))
    else:
        return np.mean([float(e) for e in exp.replace(' Yrs', '').split(' - ')])
```

df['Years of Experience Num'] = df['Years of Experience'].apply(convert_experience)

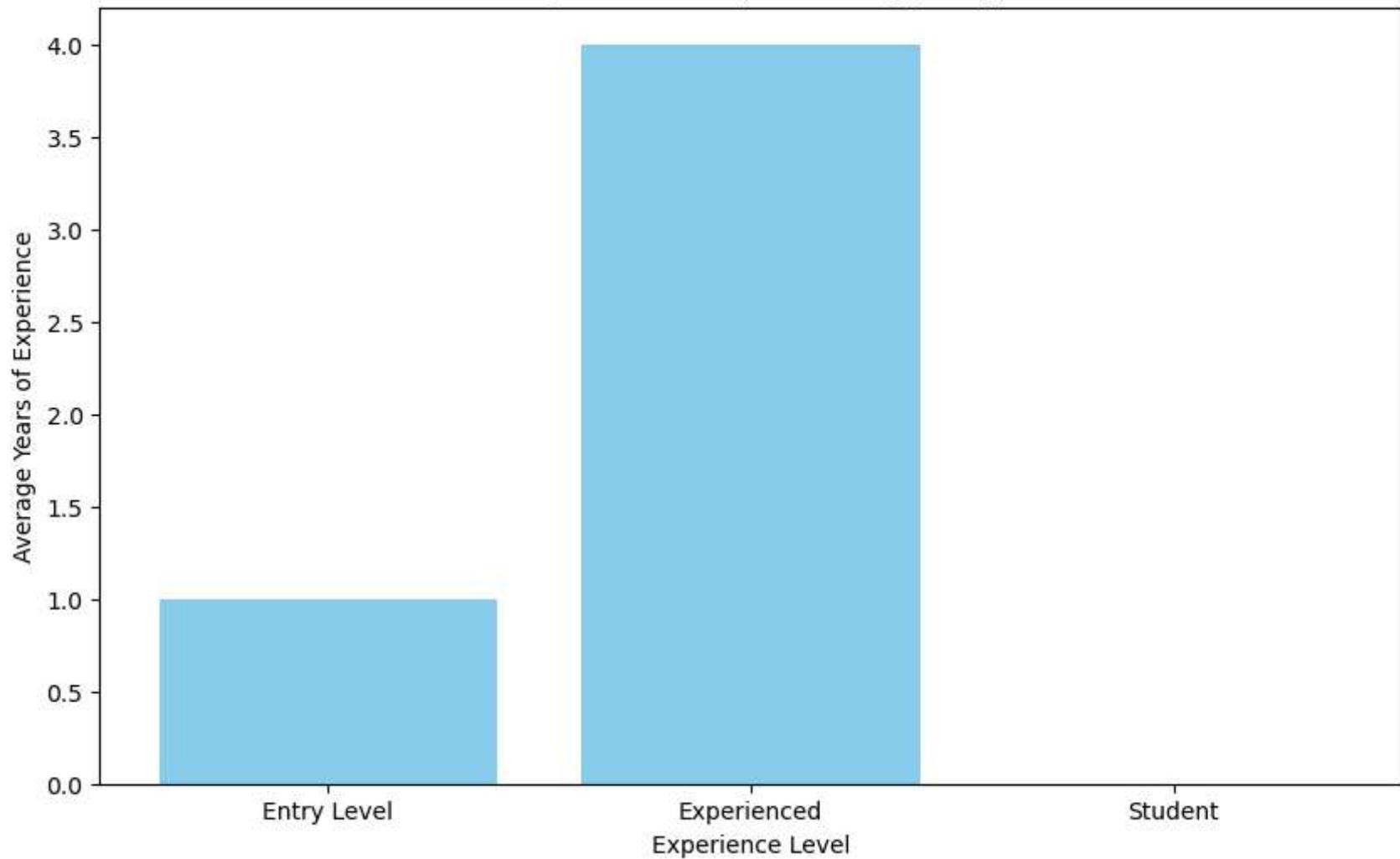
```
# Group by "Experience Level" and calculate the average years of experience
experience_by_level = df.groupby('Experience Level')['Years of Experience Num'].mean().round(0).reset_index()

# Print the results
print(experience_by_level)

# Visualize the data
plt.figure(figsize=(10, 6))
plt.bar(experience_by_level['Experience Level'], experience_by_level['Years of Experience Num'], color='skyblue')
plt.xlabel('Experience Level')
plt.ylabel('Average Years of Experience')
plt.title('Average Years of Experience by Job Type')
plt.show()
```

	Experience Level	Years of Experience Num
0	Entry Level	1.0
1	Experienced	4.0
2	Student	0.0

Average Years of Experience by Job Type



Averagey a prospective applicant needs an experience of 1year for Entry level jobs, 4years of experience for an experienced level job and no years of expereince (0) for an student or internship level jobs

Insights

Popular Job Titles: From the chart, it is evident that "Python Developer" is the most sought-after job title on the Wuzzuf platform. This indicates a high demand for Python development skills in the job market.

Job Location Concentration: Notably, Nasr City and Cairo have the highest number of job listings. This suggests that these cities are significant hubs for Python-related roles, providing ample opportunities for job seekers in these areas.

Full-Time Jobs Dominance: The majority of the jobs listed are full-time positions. This trend reflects a preference for stable, long-term employment among employers on the Wuzzuf platform.

Job Type Preference: Most of the jobs are either hybrid or require the prospective job seeker to be on-site. This indicates a preference for flexible working arrangements or traditional office settings among employers.

Experience Requirements: On average, a prospective applicant needs:

1 year of experience for entry-level jobs: This requirement is relatively low, making it accessible for recent graduates or those new to the field.

4 years of experience for experienced-level jobs: This indicates a higher skill and expertise level required for these positions.

No years of experience (0) for student or internship level jobs: This opens up opportunities for students and fresh graduates to gain industry experience without prior work experience.

Conclusion

The analysis of Python-related job listings on the Wuzzuf platform reveals significant trends in job titles, locations, job types, and experience requirements. "Python Developer" stands out as the most demanded role, with Nasr City and Cairo being prime locations for such opportunities. Full-time and hybrid or on-site job types are prevalent, indicating a blend of traditional and flexible work arrangements. The experience requirements vary, making the job market accessible to both fresh graduates and seasoned professionals. These insights can guide job seekers in tailoring their applications and career planning according to market demands.

In []: