Internship Write Up

I worked as a Web Scraping and Lead generation Intern at Tavaga Advisory Services Private Limited.

Work Responsibilities

- **SEO Scraping to increase the website's reach and engagement**
- **Scraping potential leads and their LinkedIn Id and email**
- **Lead Generation across Instagram**
- **Maintaining Firebase and Google Analytics**
- **Enhancing User experience for Emailer campaigns**

Major Contributions during the internship

- **LinkedIn Scraping**
  - A total of around 4000 potential LinkedIn IDs were scraped in the tenure.
  - It included bypassing the two-level authentication of LinkedIn.
  - Bypassing the captcha and IP blocking.
  - This was achieved by constantly changing IP using web Dynamic Host Configuration Protocol (DHCP).

- **Instagram DM bot**
  - Designed and developed an Instagram bot using Python libraries like Selenium, Requests and BS4
  - The bot was designed to scrape potential Instagram IDs.
  - On these scraped IDs Bot was then used to send direct messages to increase post and profile engagement across Instagram.

- **SEO Scraping**
  - Scraped SEO keywords for the meta keywords and meta description of the website
  - SEO keywords were also scraped to write the blog and email content for the firm.

- **FireBase and Google Analytics**
  - Analysed the website's reach and those pages that were not performing well were updated on the basis of this analysis.
  - Set up the FireBase events on Login and startup of the App.
  - Connected Firebase with google analytics to get App analytics'.
  - SDK(Software Development Kit) RnD for APP to configure with different advertisement platforms like Meta, Twitter and Google Ad services.

- **Emailer Optimization and MailTrain campaigning**
  - Optimized Emailer and made it more user-friendly.
  - Enhanced the Emailer design by using CSS media queries in the emailer HTML.
  - Ran campaigns on MailTrain on around 26,000 Emails.

Skills Developed During The Internship

- Web scraping techniques using Python libraries such as Beautiful Soup and Scrapy
- Techniques for handling and parsing different types of data, such as HTML and XML
- Understanding and working with APIs
- Data cleaning and preprocessing
- Storing data in a database, such as Firebase
- Using tools such as Interakt for customer communication and engagement
- Creating emailers and automating email campaigns
- Basic knowledge of web development and the structure of web pages
- Understanding of how to handle and avoid common web scraping challenges, such as CAPTCHAs and IP blocking.