it Aspireit

AI Engineer Internship

We are excited to announce a 3-month remote internship opportunity for an AI Engineer at Aspireit. This isn't just any internship—it's a unique chance to work directly alongside our founder on cutting-edge AI-driven products, placing you at the forefront of the industry's shift towards AI innovation.

During this internship, you will be a key member of our team, contributing to the development of three innovative AI products. You'll gain invaluable experience by working closely with our AI engineers, integrating AI models on the backend, and bringing them to life on the frontend. This hands-on involvement will give you the practical exposure needed to build next-generation products and prototypes.

Important Note: You are encouraged to use ChatGPT or any other LLM for code generation. As a forward-thinking company, we are focused on efficiency and innovation, and we'd like to assess how quickly you can complete and submit tasks.

Additionally, if you are selected for the internship, you will gain valuable exposure to ADVANCED AI TOOLS FOR CODE WRITING AND GENERATION, providing you with essential industrial knowledge. As the industry evolves, this experience will position you at the forefront of where technology is heading.

The task is on the next page.

Assignment Overview:

Objective: The objective of this task is to evaluate the candidate's proficiency in Python, API usage, NLP fundamentals, sentiment analysis, and data visualization by developing an interactive program that generates responses based on user input, performs sentiment analysis on the generated text, and creates reports with data visualization.

Task Description: Develop a Python program that interacts with the user, generates responses based on user input using OpenAI's GPT-3 model via the Hugging Face API, performs sentiment analysis on the generated responses, and creates reports with data visualizations summarizing the sentiment analysis results.

1. User Interaction:

Develop a user-friendly interface that prompts the user to input text.

Accept user input and pass it to the GPT-3 model via the Hugging Face API to generate responses. Allow for multiple interactions with the user to generate a conversation-like experience.

2. Text Generation and Sentiment Analysis:

Utilize the Hugging Face API to interact with the GPT-3 model and generate responses based on the user input.

Perform sentiment analysis on the generated responses using a sentiment analysis library or API (e.g., NLTK, TextBlob).

• Classify the sentiment of each response as positive, negative, or neutral.

3. Report Generation and Data Visualization:

Create reports summarizing the sentiment analysis results, including the distribution of positive, negative, and neutral sentiments.

Generate data visualizations such as pie charts or bar graphs to visually represent the sentiment analysis results.

Ensure the reports and visualizations are clear, informative, and visually appealing.

Evaluation Criteria for Model:

- 1. User Interaction:
- Is the user interface intuitive and easy to use?
- Does the program effectively prompt the user for input and generate responses based on the input?
- 2. Text Generation and Sentiment Analysis:
- Are responses generated by the GPT-3 model contextually relevant and coherent?
- How accurately does the program perform sentiment analysis on the generated responses?
- 3. Report Generation and Data Visualization:
- Are the reports generated by the program informative and well-structured?
- Do the data visualizations effectively represent the sentiment analysis results?

Submission Guidelines:

- Deadline: Your completed assignment should be submitted within 3 days from the date of this notification.
- Format: Compress your project files into a ZIP folder and include a README.md with your approach and setup instructions.
- How to Submit: Share your ZIP file via the Google form link:

https://forms.gle/15XCX9Gw6d3YAqfE7

(Please Note: No other form of submission will be accepted; only submit the task via the Google form link provided.)

Include your full name and contact details in the README.md. Ensure your submission file includes your full name and contact details in the README.

Evaluation Criteria for Code:

- 1. Code Clarity and Quality: We will assess the readability of your code, adherence to coding standards, and the inclusion of meaningful documentation.
- 2. API Integration and Deployment Skill: Effective and efficient integration with external APIs and successful deployment using Docker containers.
- 3. Database Integration Skill: Ability to set up and interact with a PostgreSQL database for data storage and retrieval.
- 4. Analytical Thinking: Your ability to derive insightful analysis from the sentiment analysis results, including how you interpret the sentiment of the generated text.
- 5. Execution: The application should execute flawlessly, achieving the desired outcomes as per the problem statement.

Terms of Engagement:

• **Duration:** A 3-month tenure

Engagement: Flexible scheduling.Work Environment: Fully Remote

• **Remuneration** - Below are the terms of engagement to ensure clarity:

• Internship Offer Decision:

- 1. Your eligibility for the internship role will be determined based on the quality of your submission and the outcomes of the interview process.
- 2. The final decision on whether to offer you an internship will be made by the company.
- 3. This internship is an opportunity for profound learning and professional skill development. It is an unpaid position, intended to provide you with valuable experience and the chance to demonstrate your abilities.
- 4. We emphasize that this is an unpaid internship, as clearly mentioned in the **job** description and reiterated here to avoid any confusion or misunderstanding.
- 5. Benefits:

- Certificate of Completion: Receive a certificate upon successful completion of the internship, showcasing your achievement.
- Letter of Recommendation: Earn a personalized letter of recommendation based on your performance, enhancing your professional profile.
- Referrals: Gain referrals to three well-connected companies upon successful completion of them internship, expanding your professional network and job opportunities.

Note: We believe in maintaining open communication throughout your internship. This experience is designed to help you gain practical knowledge and showcase your skills, with the potential for a full-time role based on your performance.