

REQUEST FOR EXPRESSIONS OF INTEREST

“JUNIOR RESEARCH ENGINEER, OPENAI”

AFRICAN DEVELOPMENT BANK
Avenue Joseph Anoma, 01 B.P. 1387, Abidjan, CÔTE d'IVOIRE
Corporate IT Services Department (TCIS)
E-mail : IT_Recruitment@afdb.org

Expressions of interest are being requested for **JUNIOR RESEARCH ENGINEER, OPENAI**

Brief description of the Assignment: The African Development Bank Group (AfDB) wishes to recruit a Junior Research Engineer to assist on a specific R&D¹ project. He will support the development and testing algorithms, integrating machine learning models with applications, and providing support to end-users. The engineer will support the fine-tuning of openai models (text-davinci, gpt-3.5-turbo) for a given task and delivering a high-quality and efficient solution.

Department issuing the request: Corporate Information Technology Services (TCIS)

Place of assignment: Abidjan /Cote D'Ivoire

Duration of the assignment: 06 months. The renewal will be subject to the performance of the consultant and the availability of the budget.

Tentative Date of commencement: 02 May 2023.

Detailed Terms of reference for the assignment: The TOR is in annex 1 below

Deadline for applications: 03 April 2023 at 17h00 Abidjan local time.

Applications to be submitted by email to: IT_Recruitment@AFDB.ORG

Any questions and requests for clarifications may be sent to: IT_Recruitment@AFDB.ORG

Please attach updated Curriculum Vitae on the basis of the template below:

MODEL CURRICULUM VITAE (CV)

Title of the Assignment:

Department:

Surname:

Birth Date:

Address:

Telephone:

First Name:

Nationality:

Country:

E-mail:

¹ R&D : Research and Development

Are any of your family members (spouse/partner, father/mother, Brother/sister, Son/daughter, etc.° employed in the African Development Bank?			Yes <input type="checkbox"/> No <input type="checkbox"/> If « Yes », the following data must be provided
Name	Relationship	Organization Unit	Place of Assignment

Language Level	Read	Written	Spoken
English	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent
French	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent
Other (specify)	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent	<input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent

Key Qualifications:

Please provide (i) a summary of your experience and training highlighting the most relevant for the proposed assignment, and (ii) the responsibilities which you exercised. Utilize one half-page maximum.

Education (University Level and above only):

Name of University - City - Country	Period		Diploma Obtained	Main Topic / Major
	From	To		

Professional Training:

Name of Training Institution- City - Country	Type of Training	Period		Certificates or Diploma Obtained
		From	From	

Employment Record:

Begin with your most recent employment. For each job since your Master Degree achievement, please indicate:

- Name of the Employer
- Type of Activity/Business of the Employer
- Title / Function
- Place of Employment
- Start and End date
- Period
- Brief Description of main accomplishments and responsibilities
- Technologies/framework used

Reference:

Please indicate the name and address of three persons with no family relationship with yourself, familiar with your character and titles.

I hereby certify that the responses which I provided above are all, to the best of my knowledge, true, complete and accurate. I acknowledge that an inaccurate statement or essential omission in a personal declaration or another document required by the African Development Bank might result in the rejection of my application, termination of my Contract or any other administrative sanction by the Bank. The African Development Bank may verify any statements which I made in this application.

Date: _____

Signature :

ANNEX 1: TERMS OF REFERENCE

RECRUITMENT OF JUNIOR RESEARCH ENGINEER, OPENAI

1. INTRODUCTION

The African Development Bank Group (AfDB) wishes to recruit a Junior Research Engineer to assist on a specific R&D² project.

He will support on developing and testing algorithms, integrating machine learning models with applications, and providing support to end-users.

The engineer will support on the fine-tuning of openai models (text-davinci, gpt-3.5-turbo) for a given task and delivering a high-quality and efficient solution.

2. SCOPE OF WORK

- Understanding the basics of openai language models and fine-tuning, prompt engineer.
- Preparing the dataset from AfDB knowledge base for fine-tuning.
- Fine-tuning the language model using the prepared dataset.
- Evaluating the performance of the fine-tuned model on the given task.
- Optimizing the model for efficiency and scalability.
- Collaborating with other team members to integrate the fine-tuned model into the application.
- Documenting the process and the results.
- Integrate machine learning models with applications using services such as Azure Functions, Azure Logic Apps, and Azure API Management.

3. QUALIFICATIONS AND EXPERIENCE

- Master's degree in Computer Science, Information Systems, or related field with at least 2 years of experience.
- Be under 32 years of age on 31-DEC-2023.
- Past experience in fine-tuning and prompt engineer with openai or Microsoft Azure openai Service.

² R&D : Research and Development

- Hands-on experience with openai's GPT (Generative Pre-trained Transformer) text-davinci and/or gpt-3.5-turbo models.
- Experience with Azure services such as Azure Cognitive Service, Azure Machine Learning, Azure Functions, Azure Logic Apps, and Azure API Management will be a plus.
- Proficiency in Python and deep learning frameworks such as TensorFlow/PyTorch/Keras
- Experience with natural language processing (NLP) and text classification tasks.
- Strong problem-solving skills and ability to work independently as well as in a team environment.
- Good communication skills and ability to clearly explain technical concepts to non-technical stakeholders.
- Familiarity with version control tools such as Git.

4. DELIVERABLES

The Junior Research Engineer is expected to deliver the following:

- A report detailing the approach taken for fine-tuning the language model.
- A well-documented codebase for preprocessing the dataset and fine-tuning the language model.
- A trained and optimized model that can be used for the given task.
- An evaluation of the performance of the fine-tuned model.
- Documentation, including any challenges faced and how they were overcome.

5. DURATION OF ASSIGNMENT

The duration of the mission is expected to be 6 months.

The renewal will be subject to the performance of the consultant and the availability of the budget.

6. SUPERVISION OF THE MISSION

The consultant will perform the assignment under the supervision of the Business Intelligence Team Lead within Corporate Application Services (TCIS.1) division.

The assignment can start as soon as possible.

7. LOCATION

The work will be carried out remotely.

8. REMUNERATION

The consultant will receive a monthly lump sum rate based on his experience. No additional benefits or per diem will be paid. The individual consultant is responsible for his/her own health insurance and own accommodation costs.