REQUEST FOR EXPRESSIONS OF INTEREST

"RECRUITMENT OF JUNIOR ARTIFCIAL INTELLIGENCE DEVELOPER"

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 the <u>RECRUITMENT OF JUNIOR</u> <u>ARTIFCIAL INTELLIGENCE DEVELOPER</u>

Brief description of the Assignment:

In the framework of the Bank's **Digital Ambition 2030**, the Applications and Innovation Division (TCIS1) leads software development, drives innovation, and aligns IT projects with the business needs of the Bank, ensuring technological advancements are in harmony with organizational goals. The main objective of the mission is to apply AI techniques in real-world scenarios, which might include development but can also involve research, strategy, or integration as per the specifications and priorities defined by the Technical Lead with whom the Consultants will be working and collaborating.

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

Place of assignment: Abidjan /Cote D'Ivoire

Duration of the assignment: 12 months.

Tentative Date of commencement: 07 April 2025.

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

Deadline for applications: 21 March 2025 at 17h00 Abidjan local time.

Applications are 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 based on the template below:

MODEL CURRICULUM VITAE (CV)

Title of the Assignment:

Department:	
Surname:	First Name:
Birth Date:	Nationality:
Address:	Country:
Telephone:	E-mail:

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	Main Topic / Major
Professional Training:	
Jame of Training Type of Training Period Certification City - Obtain	
From From	ificates or Diplom

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

RECRUITEMENT OF A JUNIOR ARTIFCIAL INTELLIGENCE DEVELOPER

1. INTRODUCTION / CONTEXTE

The **African Development Bank Group** (**AfDB**) is a regional multilateral development finance institution established in 1963 with a mandate to further the economic development and social progress of African countries, individually and collectively. The Bank has approximately over 2000 staff members, who have been recruited from a wide geographic area only limited by membership in the Bank. The Bank has two official languages: English and French. It co-operates with a large network of international development partners.

The Corporate IT Services department (TCIS) is responsible for the provision of efficient, effective and modern IT infrastructure and application services to support optimize and transform Bank's business process for developing Africa. Under the leadership of the Bank's Corporate IT Services Senior Director and CIO, TCIS department is mandated by the Bank to deliver the best possible IT services for Bank staff and help achieve the results that will get the Bank closer to accomplishing its development goals.

2. OBJECTIVE

In the framework of the Bank's **Digital Ambition 2030**, the Applications and Innovation Division (TCIS1) leads software development, drives innovation, and aligns IT projects with the business needs of the Bank, ensuring technological advancements are in harmony with organizational goals. The main objective of the mission is to apply AI techniques in real-world scenarios, which might include development but can also involve research, strategy, or integration as per the specifications and priorities defined by the Technical Lead with whom the Consultants will be working and collaborating.

3. SCOPE OF THE SERVICES

The consultant's duties will be as follows:

- Enabling and accelerating the development, deployment of AI solutions within AfDB
- Work closely with data management team to identify, extract, and integrate relevant data from various sources.
- Design, prototype, and develop machine learning or deep learning models tailored to specific business problems.
- Select appropriate algorithms and tools based on project requirements (e.g., Python, TensorFlow, PyTorch)
- Conduct rigorous model validation and performance testing, ensuring models meet established benchmarks.
- Collaborate with software development teams to integrate AI models into existing systems or new applications.
- Develop automated pipelines (e.g., CI/CD for AI models) to streamline deployment and updates.
- Monitor deployed solutions, addressing any performance issues and implementing necessary retraining or updates

 Maintain detailed documentation of all processes, including model architectures, data processing workflows, and integration methods.

4. **DELIVERABLES**

The following is the list of expected deliverables during the assignment:

- AI and Machine Learning models that meet user needs.
- Manage and process data, ensuring thorough cleaning, transformation, and validation to maintain high-quality inputs for model training and evaluation.
- Design custom AI Agents tailored for the financial and banking use cases such as risk management, fraud detection, complaints management, forensic, litigation and investigation.
- Contribute to the design and adoption of the top 5 identified AI uses cases that leverage machine learning (ML), natural language processing (NLP), and other AI techniques.
- Enhance AI application security by implementing security best practices to mitigate potential AI models vulnerabilities (adversarial attacks, evasion attacks, and AI poisoning attacks).
- Produce Technical Specification documentation and handover to the internal team.
- Full documentation of the developed solutions and store these codes into the Bank source code repository.

QUALIFICATIONS

- Master's degree or engineering degree in computer science or any engineering course
- Candidate must be less than 32 years of age.
- ulti-lingual ability will be an advantage

Professional Experience

- Between 2- and 4-years' experience in AI applications
- Demonstrated programming skills in Python, R, SQL and familiarity with machine learning frameworks (TensorFlow, PyTorch, or Scikit-learn)
- Familiarity with pre-built AI models and services like OpenAI's and Azure's GPT, Gemini and Microsoft Azure Cognitive Services.
- Experience with AI coding including, prompt engineering, model fine-tuning and security.
- Familiarity with Hybrid AI coding approaches and AI as a Service (AIaaS) Integration and programing frameworks like Python/Django, NodeJs;
- Exposure to cloud platforms such as AWS, Azure, or Google Cloud

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- Exposure to AI development Labs and chatbot (Rasa, Google Dialogflow and Microsoft Bot Framework).
- Knowledge of containerization and orchestration tools like Docker and Kubernetes.
- Familiarity with Data pipelines (Azure Data Fabric) and CI/CD (Azure DevOps).
- At least one cloud practitioner certification e.g. Azure practitioner, AWS Cloud Practitioner or OCI cloud practitioner
- Good understanding of Version control systems (e.g., GitLab, Azure Repo)
- Ability to tackle real-world problems with innovative solutions.
- Capable of working under tight schedule
- Exposure to MYSQL, MSSQL and ORACLE databases
- Exposure to agile development methodologies.
- Experience with automated testing frameworks for web and Node.js applications.
- Familiarity with cloud services and containerization tools (e.g., Docker, Kubernates)

5. DURATION OF THE ASSIGNMENT

The contract is expected for **12 months** (**renewable if required**). The commencement date is expected for 07 April 2025.

6. LOCATION

The work will be carried out at the Bank's Headquarter in Abidjan, Cote d'Ivoire.

7. SUPERVISION

The Consultant will undertake the assignment under the Technical Lead within the Application and Innovation division of the IT department.

8. REMUNERATION

The remuneration will be based on the Consultant experience and the Bank GUIDELINES ON INDIVIDUAL CONSULTANTS' REMUNERATION.