

Job Description: Software Developer / Back-End Engineer

Organization: [Transcend](#)

Position: Software Developer / Back-End Engineer

Team: AI Development Team

Product: AI Conflict Analysis Tool and Decisionmaking Support Platform

Technologies: Retrieval-Augmented Generation (RAG), Agentic AI, Large Language Models (LLMs)

Location: Remote, preference for Washington, DC

Type: Initially 10+ hours per week for equity

Who Are We?

Transcend is a mission driven start-up that is applying artificial intelligence and machine learning (AI/ML) to end violent conflicts and make peace. Transcend is built to free people and nations from violent conflict by helping governments and multilateral organizations make peace better. It helps peace-interested entities understand complexities, find common ground, and design better peace initiatives. Our purpose is to design and implement humane AI systems that facilitate cooperation, problem solving, and option generation. By tailoring inclusive decision-making processes and evidence-based approaches to each context, we hope to inspire a new generation of leaders committed to nonviolent conflict resolution.

Why You are Needed

We are seeking an exceptional software developer/back end engineer to join our team, potentially as a co-founder, playing a pivotal role in implementing the technical direction of our organization and helping us achieve our ambitious goals. As a key member of our team, you will be responsible for working with our ML Engineer and CTO to develop the architecture that supports our AI systems and connects those systems with user-facing platforms. You will collaborate with stakeholders across various domains, and will ensure the ethical use of technology to promote peace and social good. We're looking for someone that can help take our concept to an MVP and beyond. This is an exciting opportunity to combine your passion for AI, your commitment to making a difference, and your entrepreneurial spirit to create a truly impactful and disruptive technology venture.

About the Role

The Software Developer/Back-End Engineer joins a dynamic team to build a cutting-edge AI-powered peace platform. This leverages advanced methodologies such as Retrieval-Augmented Generation (RAG), agentic AI, and Large Language Models (LLMs) to provide actionable insights for conflict resolution and decision-making.

As a Back-End Engineer, you will design, implement, and maintain the robust architecture required to support our AI systems. Your contributions will ensure the product's scalability, reliability, and efficiency, enabling it to deliver impactful insights in real-time.

Key Responsibilities

- **System Architecture Design:**
 - Design and implement scalable, fault-tolerant back-end architectures to support RAG and LLM-based workflows.
 - Develop and maintain APIs for seamless interaction between front-end, ML models, and data layers.
 - **Database Management:**
 - Design, optimize, and manage data storage solutions, including relational databases, vector databases, and data lakes.
 - Ensure efficient indexing and retrieval of structured and unstructured data for AI model integration.
 - **Infrastructure Development:**
 - Build and maintain infrastructure for real-time and batch processing of data.
 - Implement robust logging, monitoring, and error-handling systems to ensure uptime and performance.
 - **Integration with AI/ML Systems:**
 - Collaborate with ML engineers to integrate AI models (LLMs, RAG frameworks, agentic systems) into the back-end.
 - Ensure seamless orchestration of workflows between data ingestion, preprocessing, and model inference pipelines.
 - **Security and Compliance:**
 - Implement security best practices for data and API interactions, including authentication, encryption, and data access policies.
 - Ensure compliance with relevant regulations and ethical AI guidelines.
 - **Collaboration and Communication:**
 - Work closely with product managers, ML engineers, and (eventual) front-end developers to align technical implementations with business goals.
 - Document systems, APIs, and workflows to facilitate team collaboration and onboarding.
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Requirements

Technical Skills:

- Proficiency in back-end development languages (e.g., Python, Java, Node.js, or Go).
- Experience with RESTful and GraphQL API design and implementation.

- Strong knowledge of database systems, including SQL (PostgreSQL, MySQL) and NoSQL (MongoDB, DynamoDB) databases.
- Familiarity with vector databases (e.g., Pinecone, Weaviate, Milvus) and search technologies (e.g., Elasticsearch, OpenSearch).
- Experience with cloud platforms (AWS, Azure, GCP) and containerization tools (Docker, Kubernetes).
- Understanding of distributed systems, microservices architecture, and message queues (e.g., RabbitMQ, Kafka).
- Knowledge of CI/CD pipelines and infrastructure-as-code tools (e.g., Terraform, CloudFormation).

Soft Skills:

- Strong problem-solving and analytical abilities.
- Excellent communication skills and ability to collaborate in cross-functional teams.
- Detail-oriented with a focus on building maintainable and scalable systems.

Qualifications:

- Bachelor's or Master's degree in Computer Science, Software Engineering, or a related field.
- 3+ years of experience in back-end development or software engineering roles.
- Proven track record of building and maintaining scalable systems in production.

Nice to Have:

- Familiarity with AI/ML concepts, especially RAG, agentic AI, and LLMs.
- Experience with streaming data systems (e.g., Apache Spark, Flink).
- Understanding of ethical AI principles and their application in system design.

What We Offer

- The opportunity to work on a meaningful product with real-world impact.
- A collaborative, innovative, and growth-oriented team environment.
- Competitive salary, benefits, and opportunities for professional development (once we secure contracts and funding).
- Flexibility in work arrangements, including remote work options.

To Apply

Send your resume, a paragraph outlining why you want to join Transcend, and any highlights of your work or contributions to team@missiontranscend.ai. In the subject line put, "Software

developer/back-end engineer Application, First Name Last Name". Feel free to include links to your LinkedIn, Website, Twitter, GitHub, or anything else you want to share.

Join us in shaping the future of AI-driven conflict analysis and resolution!