# REGREENING EXPERT GPT

## Empowering Sustainable Agriculture in Africa



### Limelights/Justdiggit

#### **Project Overview**

Participating in the AI for Good Hackathon hosted by Limelights, we teamed up with Justdiggit, a Dutch NGO committed to environmental restoration in Sub-Saharan Africa. Our main goal was to leverage artificial intelligence to empower subsistence farmers with knowledge and tools for sustainable land rejuvenation and provide scalable and direct support through an intuitive AI-driven platform.

#### **Innovative Solutions**

The Regreening Expert GPT was meticulously designed to meet these needs:

- Custom GPT Development: We built a tailored GPT model capable of understanding and interacting in multiple local languages.
- Interactive Engagement: The GPT functions as a chatbot that conducts structured interviews with farmers about their land conditions and needs.
- Personalized Recommendations: Based on user responses, the chatbot offers customized guidance on implementing one of Justdiggit's 26 scientifically-backed landscape methods.

#### Impactful Results

Since its launch, the Regreening Expert GPT has achieved remarkable success:

- 100% Recommendation Accuracy: Every interaction has resulted in suitable, personalized recommendations for sustainable practices.
- Empowerment at Scale: The tool has significantly increased the reach of Justdiggit's programs, delivering expert knowledge directly to the farmers' fingertips.
- Recognition and Support: The innovation was showcased at an industry event, attracting interest from significant players for potential funding and support.

#### Conclusion

The Regreening Expert GPT exemplifies the power of AI in promoting sustainable agriculture. By addressing critical challenges through innovative technology, this tool has not only empowered individual farmers but also paved the way for broader environmental impact across Sub-Saharan Africa.