Google Cloud Vertex AI Hackathon
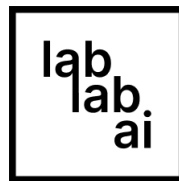
ChatBot for Autism Kids

Enhance communication abilities in children with autism.

Google Cloud

lab lab ai

Source: https://www.verywellhealth.com/is-late-speech-a-sign-of-autism-259888

Source: https://www.csiro.au/en/research/technology-space/ai/chatbots-for-therapy
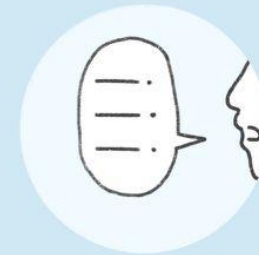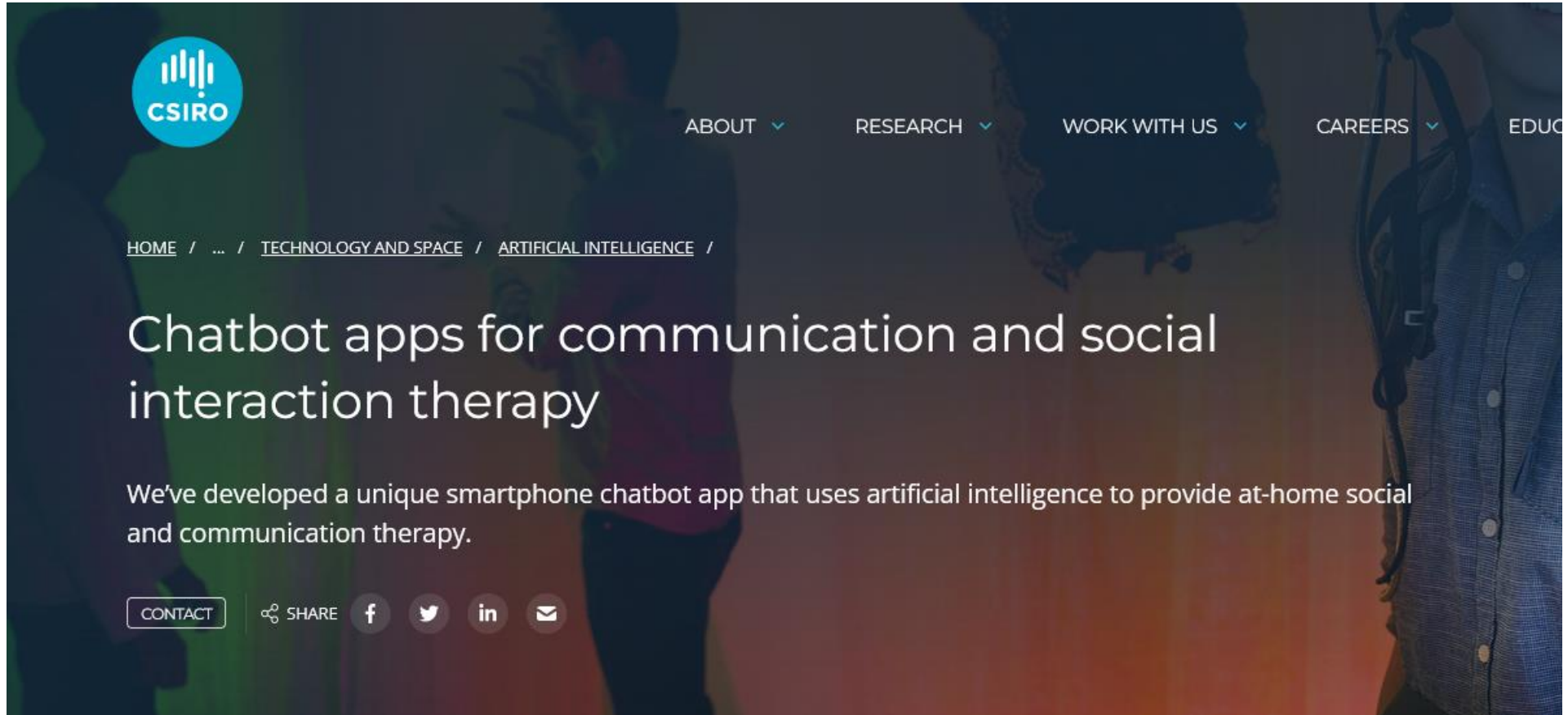
The Solution:
Speech and Communication
Training Using Google Cloud
Vertex AI model

Support children with autism throughout their communication journey

- Build Essential Communication Skills
- Improve Social Interactions
- Develop a Sense of Autonomy

Mode 1: Augmentative and Alternative Communication (AAC)

Provides visual aids to facilitate understanding and expression.

- Effectively convey their needs, wants, and thoughts visually,
- Fostering independence
- Reducing frustration.

Technologies: PaLM 2 (Chat) + Stable Diffusion (Visual Aids)

Mode 2: Text Communication

Allows children who are more comfortable with written language to engage in meaningful conversations

Technologies: PaLM 2 (Chat)

Mode 3: Speech Communication

Children can use their own voice to communicate, with the ChatBot understanding and responding accordingly.

Technologies: PaLM 2 (Chat) + Chirp (Speech Recognition)

How can it help autism kids ?

This application provide:

- A safe and controlled environment for communication and social interaction.

- Consistent and predictable responses, reducing anxiety and stress for the child.

- Engaging and educational content, helping to improve cognitive and social skills.

Key Features:
Simplicity and Ease of Use

Can be easily programmed by speech and occupational therapists, as well as other key stakeholders involved in the child's development

EASY TO USE

The Competitor

	Proloquo 2Go	Speech Blubs	Ours
AAC	☑	☑	☑
Text	☑		☑
Speech		☑	☑
Customize	☑		☑
Stakeholders		☑	☑

Thank You