

NATURAL LANGUAGE PROCESSING RESEARCH CAPABILITIES

From technology to impact: Leveraging natural language processing to address national educational challenges



Bridging language and literacy barriers

Natural Language Processing can make education more accessible in learners' mother tongues, supporting foundational literacy, expanding access to learning resources and addressing South Africa's multilingual education needs.



Supporting teachers and learners

Language technologies can complement teachers by providing tools that support reading, listening, comprehension and personalised learning.



Making digital learning more inclusive

Locally developed technologies can make digital learning more inclusive, extending educational opportunities to underserved learners and schools across South Africa.



Building solutions for South Africa's educational challenges

Through the development, testing and commercialisation of locally relevant AI and language technologies, we explore practical ways to strengthen education across the learning journey, from foundational literacy to digital learning and lifelong education.



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NLP RESEARCH OFFERINGS

Speech technologies

- Text-to-speech
- Automatic speech recognition
- Speech analysis
- Multilingual speech search



Text technologies

- Large language models
- Retrieval-augmented generation
- Knowledge base development
- Text analysis
- Misinformation detection
- Social listening solutions



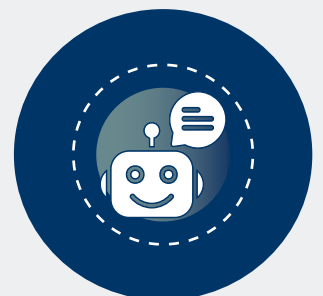
Education

- Literacy enablement solutions
- Multilingual content generation
- Readability assessments and models
- WhatsApp-based education interventions



Customer service

- Multilingual chatbot architectures
- Information retrieval solutions
- Speech and text mining
- Voice-enabled multilingual customer service offerings
- Smart routing and automation



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what we do**



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