



End-to-end speech recognition for assessing comprehension skills of children learning to read

About Lalilo

Lalilo is a virtual assistant which helps educators teach primary school students how to read.

The startup was launched in 2016, with the goal of ending illiteracy with AI. In France 20% of the students who graduate from elementary school (*collège*) can't read proficiently enough to keep up with the academic demands of the classroom. In the US, that number goes up to 30%. By providing differentiated learning to students, we want to drive that number down to 0. Our tool is already used by more than 81k teachers and 600k students, and growing!

To reach this goal, we have brought together experts in pedagogy, teachers, designers and scientists who work hand in hand to build the best classroom tools for students and educators. Recently acquired by Renaissance, we are a team of 33 passionate, hard-working and fun individuals 🐰, based in Paris, New York, and San Francisco.

About IRIT

IRIT (Institut de Recherche en Informatique de Toulouse) is a computer science laboratory organized in seven scientific departments among which are the themes "AI" and "Signals and Images". The SAMoVA team focuses on signal processing, modelling and analyzing audiovisual content, in particular speech and audio.

About the internship

This internship will be part of the CHICA-AI research project funded by the National Research Agency (Agence Nationale de la Recherche, ANR). This project aims at developing an spoken-aloud summary activity for training children reading comprehension skills, using speech recognition, speech understanding, audio analysis, natural language processing and cognitive psychology. This activity will in the end offer targeted feedback to students to improve their summary and comprehension skills, as well as detailed reports to teachers to help them incorporate the activity in their teaching.

The internship will focus on one or two aspects, depending on the advancement of the project:

- speech recognition, with the objective of improving the quality of the transcription of the oral summary recordings;
- audio analysis, with the objective of finding new insights from audio to assess the comprehension of the child.

This internship will be done in close collaboration between Lalilo and IRIT. You will be supervised by Dr. Lucile Gelin (Associate researcher at Lalilo and IRIT) and Dr. Thomas Pellegrini (Associate professor at IRIT). You will be based in the IRIT Toulouse office. You will have at least 1 trip (a few days) to Paris to meet the Lalilo team and discover the company's environment.

We are looking for a 5-6 months internship, starting in February-April.

About you

We're looking for somebody who:

- Rigorous in your work
- Being proactive
- Autonomous
- Interested in research
- Strong desire to learn

Required skills

- Python
- Theoretical knowledge in machine learning
- Technical English

Appreciated skills

- Pytorch
- Theoretical knowledge in speech processing and/or signal processing
- Interested in innovation for education

Recruitment process

- mandatory CV & optional motivation letter
- technical test & motivation interview

To apply

Apply through the [Welcome to the Jungle website](#). Please submit your resume and optionally a cover letter explaining why you would like to join Lalilo.