

Student Project / Internship:

App development to assess and contextualize audio files during a clinical standard assessment – a user centered design process

Hertenstein/remote – 3-6 months (flexible) - flexible start

cereneo Foundation is a non-profit research centre with a research focus on developing and implementing technological solutions to improve neurorehabilitation outcomes. We work on digital, objective assessment solutions and their implementation into clinical routine. The foundation works closely with a neurorehabilitation centre to ensure true multi-stakeholder integration within each research project.

To support our ongoing research projects, we are looking for a Master student or Intern with enthusiasm for application development, human voice data collection and analysis and user-centered design process. We are passionate about bringing innovation to the field in neurorehabilitation, and you should equally bring a strong drive to work on real-world projects that have a direct impact on patients' rehabilitation experience.

Project Background.

Clinical assessments to track vocal recovery after a neurological insult are time consuming and strongly depend on analogue perceptual scoring. Automatization of such assessments would be highly desirable to save therapists time and potentially refine the assessments. The goal of this project is thus, to digitise the testing process with the aim of a) simplifying the assessment procedure b) automatized the analysis of the voice and speech pathology c) generate a database of valuable, contextualised clinical voice data during clinical routine.

For this purpose, an application should be developed in close interaction with the clinical speech and language therapists to allow conduction of the clinical assessment (Bogenhausener Dysarthria Scale) and direct (real-time) entry of observations and perceptual scores. In addition, we aim at integrating available PRAAT algorithm to allow automatic analysis of relevant parameters for therapists.

Project Tasks

Your tasks will involve UI/UX Design, mockup development, App Development using Android Studio and **Java**, PRAAT algorithm integration, Application Testing (Front-end/back-end functionality, device compatibility, installation and storage, Security optimization), gather and implement user feedback.

You will communicate directly with clinical speech and language pathologist, Clinical IT services and researchers.

Your Profile

- A Bachelor in Information Technology, preferably with focus on medical informatics
- Basic knowledge in UI/UX design, Java. Working with an environment containing database, server requests (FTP), API, SDK.
- Interest in voice pathologies and working in an interdisciplinary research group in a clinical environment
- Reliability and structured working
- Enthusiastic, friendly and communicative approach to work

We offer

- Direct exposure to a different stakeholders of a clinical environment
- A unique and stimulating work environment combining world class neurorehabilitation practice with cutting edge research
- Direct exposure and deep integration with a clinical research environment, incorporating a wide range of practitioners and patients
- On-site accommodation (Vitznau), free parking (Hertenstein), modern working culture, and opportunities for working remotely

Curios? So are we!

To apply please send your request and CV to sandra.giovanoli@cereneo.foundation.

Questions regarding the position should also be directed to that contact.

Further information about cereneo Foundation can be found at: www.cereneo.foundation