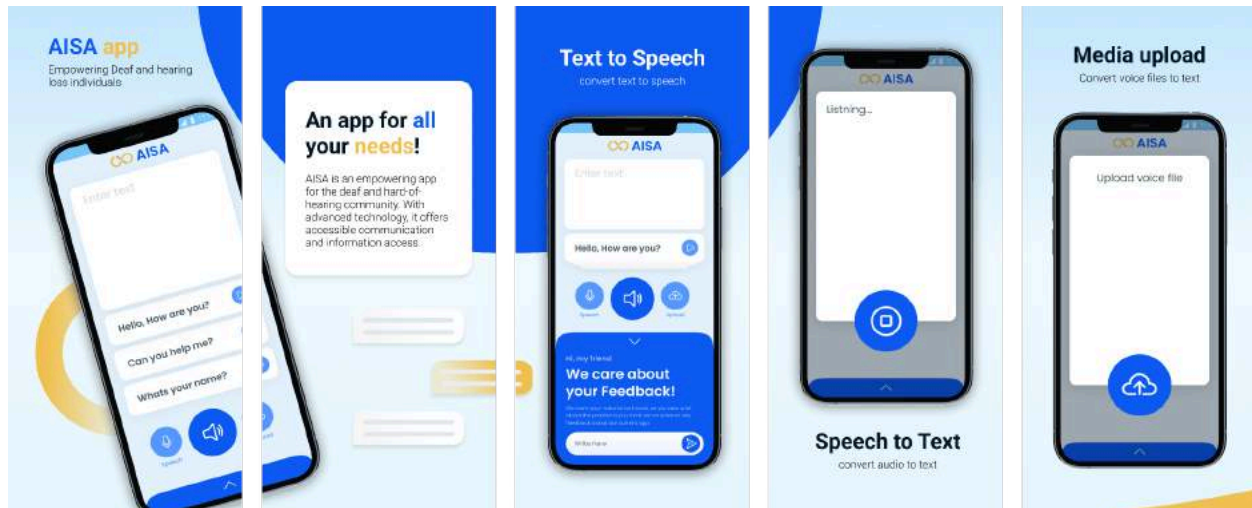


AISA Report

Using the UWC Atlantic College Lighthouse grant, we managed to achieve several different goals and milestones within our project, from launching the first version of our app and website to hosting an event for deaf and hearing loss individuals.

AISA App & Website

Using the grant, we managed to team up with a group of individuals including designers and programmers to create the first version of our [app](#) (available on Google Play) along with launching our [website](#), which was a huge milestone for our project. This primary version of the app provides features such as Text-to-Speech and Speech-to-Text functionalities. These features will enable deaf individuals to convert and communicate in written form and obtain written transcripts of spoken language, bridging the communication gap between hearing and deaf individuals. Furthermore, the grant helps us to expand our research on our main feature, the Sign language text translator, leading to the [AISA's image processing algorithm research paper](#). On the other hand, our early version of the website provides users and interested individuals with information about our project and our solutions, along with extended information about our team.



AISA Event

In order to test the App, we held an event also known as “AISA Event” to bring the deaf community together, celebrating both the app and the collective power of inclusivity. This event wasn't just about lines of code or app downloads. Early users shared stories of newfound confidence, expressing themselves freely and forging deeper connections. The app empowered them to access information independently. More importantly, for us, this event was the ultimate reward



and motivation to continue working on our project. Through this event, we managed to secure a lot of positive and constructive comments on our platform, which led us to further improve the app.



At the AISA Event, we brought together over 30 members of the Deaf community to present the first version of the AISA application. This gathering provided a platform to showcase the app, available on Google Play, and receive valuable feedback from the attendees. The event aimed to engage the



community directly, allowing them to explore the features of AISA and share their thoughts on its functionality. This interaction not only facilitated a deeper understanding of user preferences but also created a sense of inclusivity and collaboration. The attendees had the opportunity to experience firsthand how AISA could address their communication needs, marking a significant step towards refining and enhancing the application based on real user input.

AISA isn't just an app; it's a bridge. Its technologies like Speech-To-Text and Text-To-Speech can act as a conversation bridge between the deaf and hearing loss community with others. We experienced many milestones on this journey, The first one was at the AISA Event when the announcement just finished and we were preparing for the Break, we saw tears of joy from some of the participants who were too excited about this beta version. These tears became exactly the fuel of the rocket engine of our progress and It was enough for us to keep this vision, and move toward this.

As a part of the event, we performed extensive market research across several DHL communities, including precise questionnaires, surveys, and interviews with over 50 DHL individuals and several activists in this field (Age range of 14 to 50 years old with different hearing levels). Through this research, we identified several key issues and effective solutions. Issues include difficulty in communicating with hearing people, limited access to audio-based information, and social isolation which can have a profound impact on an individual's quality of life and their ability to fully participate in society. Considering all these issues, 70% of attendees never used technology as a solution for their problems before (including any smart devices or Apps), 75% of attendees prefer to use a modern solution (online notes) to communicate, rather than traditional solutions (like pen & paper), and most importantly 90% of the attendees found our solutions fully useful and applicable in their daily life. From the surveys, we also found out that our attendees experienced a huge lack of accessibility to information and data.





Tehran Deaf & Hearing Impaired Center

As part of our market research, we traveled to Tehran, the capital of Iran, to visit a Deaf and Hearing Impaired Center. Our goal was to gather comprehensive information about this community directly from the center's manager and activists who are deeply involved in advocating for the rights and needs of the hearing-impaired. Upon arrival, we were warmly welcomed by several hearing-impaired individuals, whose openness and friendliness made our visit incredibly insightful.

Engaging in meaningful conversations with these individuals, combined with the detailed insights provided by the center's manager, gave us a great understanding of the unique challenges they face on a daily basis. We learned about various aspects of their lives, including the difficulties they encounter in communication, education, employment, and social integration.



AISA Achievements

AISA Platform also managed to secure several different prizes and achievements including becoming the Gold medal project in the "[Harvard CS50x Fair 2023](#)" among over 32,000 participants and hundreds of projects, and became nominated as one of the top projects in both "[CAP Annual Conference 2022](#)" and "[CAP Annual Conference 2024](#)". As part of our solutions, we also started the first Sign Language Club at UWC Atlantic College, called "Sign By Side", teaching British Sign Language to interested students and promoting inclusivity in the college.





Future Vision

We're considering adding enjoyable educational games to enhance the learning experience. Additionally, we envision expanding AISA's accessibility beyond smartphones to include VR and AR gadgets. We picture AISA transforming the learning journey for Deaf individuals, making it seamless and enjoyable. Through ongoing conversations with our community, we seek valuable insights to continuously increase AISA, aiming to create an effective and impactful communication tool for everyone.

We're doing a lot of research, going deep into how people learn, especially in Neuroscience. This research will help us make AISA better in the future by creating features based on useful knowledge. We want to understand how learning works, especially in the brain, so we can make AISA helpful. Our goal is to use this research to make features that are not just new but also useful. We're working hard to ensure AISA is not just cool but also based on science to make learning better for everyone.

In short, we had some tough times in the R&D stage, looking into different communities. It was a mix of tough and fun moments at the same time, but the challenging part was not having too much information about people with disabilities! We made the first version of the AISA App, Published it on Google Play, and had an incredible AISA Event. We learned a lot and faced many challenges, but in the end, we made some smart decisions to make AISA happen and to make a difference together!

It was like a little adventure we're proud of, finding our way even when things get a little bit challenging!