

I LIVING LAB 33

ROBOTICS

**PORTFOLIO UPDATED EVERY**

Visual impairment

**Geovana Gomes**

GEOVANA GOMES

A picture containing person

Description automatically generatedI am a mechanical engineering student in love with life, who lives from the details that give meaning to human existence. I am a versatile person who appreciates subjects ranging from the technological and technical world of Mechanics to areas of more emotional and spiritual involvement such as literature and art. I enjoy my own company, but I don't miss spending quality time with people who add value to me and vice versa. I cannot underestimate the strong bond of friendship between a man and his dog. I experience this myself with my dogs.



ILL 33

ILL will not only help my team and I improving ourselves, but everyone who may one day benefit from the ideas that will come to life in this 6 week period.

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# Onboarding week 1

1. **Who am I and why have I registered for an ILL?**

I am Geovana Gomes a 22 years old student at MATE University in Hungary and I have registered for an ILL because I want to challenge myself, get out of my comfort zone, meet new people and open up for a new and a revolutionary mindset.

1. **What is my field of study?**

I am a Mechanical engineering student ’’technology field’’

1. **What do I plan to do after finishing my studies?**

I plan to look for a job in the technology field and bet on a several innovative projects

1. **Who/What motivates me?**

My family is my greatest motivator

1. **What do I do in my free time? / What am I passionate about?**

In my free time I usually read books, watch movies, walk, listen to music, watch various types of documentaries and podcasts and talk to friends and family. I am fascinated by languages and technology.

1. **What are my strengths?**

I am a person committed with work and I am always open to new ideas and suggestions and I like to learn and its process.

1. **What do I already know about the challenge topic (when/where/how did I first encounter it)?**

What I know about the topic is merely theoretical. I just think that AI is a great tool for disabled people and can make their lives easier in a variety of ways. AI can help them with activities of daily living by providing assistance with tasks such as mobility, medication reminders, and communication. AI can also provide access to information that is otherwise difficult to access, such as online education materials, job opportunities, and healthcare resources. AI can also provide companionship or emotional support to those with disabilities. For example, AI-powered robots can provide conversation and encourage social interaction, as well as help reduce loneliness and social isolation.

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# Onboarding week 2

1. **How was the Kick Off & 1. Onboarding Week for me?**

It was a week with expectations and fears, because it was the beginning of something totally new to me.

1. **Who is my reflection partner?**

For some reason, the partners have not yet been formed so far, but I believe it will be next week.

1. **How did self assessment on Future Skills go?**

I think it was reasonable and I'm optimistic about my progress.

1. **Which 3 Future Skills have I chosen & why?**

Life and Professional skills- The ILL is my first oppportunity to develop myself in this field, that i am still to inexperinced

Communication-I am an introverted and not so social person and this often gets in the way of my ability to communicate effectively

Critical thinking and problem solving- I think it is a skill that everyone should have and since  I have this opportunity to develop it more deeply, I am going to take advantege of it

1. **My current level & my goal level by the End of this ILL for each chosen Future Skill**

On a scale of 1 to 10 I would say that, for '' Life and Professional skills '' would be a 3 and my goal is 8 and for '' Communication'' it would be a 4 and I would like to achieve 8 and for '' Critical thinking and problem solving'' it would be a 6 to 8 as well. I made this rate because I need to be reasonable and realistic to myself, and saying 10 to these goals I would not be that reasonable.

1. **What have I find out in my desktop research?**

A recent example of Artificial Intelligence used to help disabled people is the Google AI initiative to build an AI wheelchair. The AI wheelchair uses computer vision and natural language processing to help disabled people navigate through their environment more autonomously. The AI wheelchair can also recognize and respond to facial expressions and detect objects in its environment. The AI wheelchair is still being tested and refined, but its initial results have been promising. It has been able to provide a much better independence and mobility for disabled people than before.

1. **What will I focus on next week?**

This week I will focus on finding the most appropriate and specific ideas possible so that they can be added to our project.

# week 1

1. **How was the 2. Onboarding Week for me? How did we as a Team begin?**

It was calm. I've been looking forward to learning more about our group dynamic and getting to know each member better. And as a team, ILL 33, in my opinion, started very well, because the members were very open up with each other and knew how to overcome the nervousness of working with completely new and unknown people, despite being the first contact in a more intimate way.

1. **Who is my new reflection partner?**

My reflection partner is Bonolo and I'm playing as Jules’s reflection partner.

1. **Which skills, knowledge, strengths will help me with the DT Process?**

I am a person committed to my tasks, I like to read, research and update myself in order to have a good position and opinion to give, I like to take advantage of any constructive and healthy opportunity to improve myself as a human being who wants to contribute to technological development and civic society. But perhaps most important of all is the fact that I am an empathetic person who cares for others, so I believe that the desire to help people with disabilities will be a great incentive for me to improve my DT process.

1. **What did I learn?**

I learned what it's like to work in a group, I learned that tolerance and respect for the opinion of my colleagues will be one of the pillars for the completion of a successful project.

1. **What surprised me?**

What surprised me was our coach who has an incredible personality, he is always willing to help and encourage us so that we are able to get to know each other and see pleasure in what we start accomplishing, even in small ways.

1. **My sparkling moment**

I think my sparkling moment was when I felt the urge to express myself with my colleagues and openly give my idea about what one of the rules in the group would be and also for suggesting that we think about researching people with autism to know how our project would be useful to them.

1. **What have I found out in my desktop research?**

I did research on the concept of disabilities on which we are thinking of developing our project**.**

**What is vision impairment?**

A vision impairment is defined as a limitation of one or more function of the eye, or visual system. This can range from mild vision impairment, to total blindness. It cannot be corrected to normal vision with prescriptive lenses or surgery.

A person with vision impairment may have some useful vision, referred to as functional or residual vision. However, the loss is severe enough to affect the ability to perform vocational, recreational and/or social tasks.

**What is hearing impairment?**

The term "hearing impaired" is often used to describe people with any degree of hearing loss, from mild to profound, including those who are deaf and those who are hard of hearing. Many individuals who are deaf or hard of hearing prefer the terms "deaf" and "hard of hearing," because they consider them to be more positive than the term "hearing impaired," which implies a deficit or that something is wrong that makes a person less than whole.

"Deaf" usually refers to a hearing loss so severe that there is very little or no functional hearing. "Hard of hearing" refers to a hearing loss where there may be enough residual hearing that an auditory device, such as a hearing aid or FM system, provides adequate assistance to process speech.

**What is autism?**

Autism spectrum disorder (ASD) is a developmental disability caused by differences in the brain. People with ASD often have problems with social communication and interaction, and restricted or repetitive behaviors or interests. People with ASD may also have different ways of learning, moving, or paying attention.

**What is dwarfism?**

Dwarfism is short stature that results from a genetic or medical condition. Dwarfism is generally defined as an adult height of 4 feet 10 inches (147 centimeters) or less. The average adult height among people with dwarfism is 4 feet (122 cm).

Many different medical conditions cause dwarfism. In general, the disorders are divided into two broad categories:

* **Disproportionate dwarfism.** If body size is disproportionate, some parts of the body are small, and others are of average size or above-average size. Disorders causing disproportionate dwarfism inhibit the development of bones.
* **Proportionate dwarfism.** A body is proportionately small if all parts of the body are small to the same degree and appear to be proportioned like a body of average stature. Medical conditions present at birth or appearing in early childhood limit overall growth and development.

**What is muteness**

Muteness or mutism is defined as an absence of speech while conserving or maintaining the ability to hear the speech of others. Mutism is typically understood as a person's inability to speak, and commonly observed by their family members, caregivers, teachers, doctors or speech and language pathologists. It may not be a permanent condition, as muteness can be caused or manifest due to several different phenomena, such as physiological injury, illness, medical side effects, psychological trauma, developmental disorders, or neurological disorders. A specific physical disability or communication disorder can be more easily diagnosed. Loss of previously normal speech (aphasia) can be due to accidents, disease, or surgical complication; it is rarely for psychological reasons.

Treatment or management also varies by cause, determined after a speech assessment. Treatment can sometimes restore speech. If not, a range of assistive and augmentative communication devices are available.

1. **What will I focus on next week?**

Next week I will focus on more specific aspects according to what will be discussed in the group on Monday.

<https://www.visability.com.au/about-visability/vision-resources/what-is-vision-impairment/>

<https://www.mayoclinic.org/diseases-conditions/dwarfism/symptoms-causes/syc-20371969>

<https://www.nhs.uk/conditions/autism/what-is-autism/>

<https://en.wikipedia.org/wiki/Muteness>

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# **WEEK 2**

**How was the 1. ILL Week for me?**

The first week at ILL was productive and very interactive and as a group we came to a conclusion about what our target will be. We decided that our project will be about People with visual problems because we will have many more options of existing devices to be improved or adapted in order to help our target audience.

1. **What did I learn while reading other Portfolios?**

I learned that working in a group is very good because through the portfolios of my colleagues I could see the skills and strengths of each one that will be very useful when we distribute tasks. Now we know what each one identifies with the most, some are very creative, others enjoy using a lot of information because they are good researchers and others are more pragmatic, which reveals objectivity and clarity of their ideas

1. **What did I learn?**

I learned that it is very important to listen to what others have to say, but that I must be careful not to assume a passive posture.

1. **What surprised me?**

We didn't really have any big surprises during our meeting, I still appreciate the fact that we agreed so quickly on what we are going to do and what we want to do.

1. **What will I focus on next week?**

This week I will focus on how I can get in touch with a person with visual problems so that through an interview that person can provide us with some data about what kind of difficulties the visually impaired face and what the person thinks would be of great help.

1. **Which creative methods have I / we applied last week? How did that go?**

I used the exploratory research method and also talked to some friends about ILL and my team's task and my friends gave positive feedback. This motivated me a lot to research about devices that are available to help people with visual impairments and this made it a good contribution during our discussion on the subject. But the information I presented was researched in references found on the internet.

**Exploratory research:**

The purpose of exploratory research is to identify something, that is, a possible object of study or a problematization that could be the subject of future research.

**In this case, we are exploring objects that can be improved in the near future.**