HCI Blog Series (⅙) - My Journey Begins

Introduction: Who Am I?

My name is Abdoulfatah Abdillahi, and I am a Master's student in Data Science and Artificial Intelligence at San Francisco State University. Over the past two years, I have been deeply involved in research that combines biology and AI. Specifically, I worked with the [CodeLab](#) team to study antibiotic resistance in *E. coli* by creating large pangenome datasets and building machine learning models to predict drug resistance.

In simple terms, I worked on a project where biology meets computer science — using AI to help doctors and scientists figure out which antibiotics might stop working in the future. This experience not only strengthened my technical skills but also made me curious about how people interact with these systems. That curiosity is what brought me to Human-Computer Interaction (HCI).

Why does HCI Excite Me?

- This is my first time taking an HCI course. Back in my undergraduate days, many of my friends talked about HCI, but I didn't quite understand what it was. Now as a graduate student, I see its importance.
- So far, I've learned that HCI is not just about computers — it's about people. It's the process of making communication between humans and computer systems smooth, intuitive, and meaningful. For example, designing interfaces that are easy to navigate, even for someone with no technical background.
- As a researcher, I often deal with very complex biological problems. HCI excites me because it can help me explain my work more clearly, design better tools for scientists, and make sure that even people without a computer science background can understand my results.

HCI in My Life: 3 Positive Examples

When I reflect on my daily life, I realize that HCI has quietly shaped many of my experiences:

1. **ChatGPT for Learning** – I use ChatGPT not just as a conversational tool, but also as a way to train myself as a machine learning engineer. It provides explanations, examples, and guidance in a way that feels interactive and natural. The design of its interface makes complex learning less intimidating.

2. **Slack for Collaboration** – During my research work, I used Slack to communicate quickly with my principal investigator (PI) and teammates. Features like threads, searchable history, and integrations made teamwork faster and more efficient.

3. **Google Maps for Everyday Navigation** – One tool that has saved me countless times is Google Maps. Whether I'm finding the fastest route to campus or exploring a new city, its clean design and user-friendly features make navigation effortless. Without realizing it, I've been benefiting from years of HCI research every time I use it.

How HCI Shapes My Growth

- For a long time, I used these tools without realizing they were products of HCI. Now I understand that learning HCI changes the way I see technology. Instead of only asking "What does this system do?" I now ask, "How will people experience this system?"
- This shift is important for my career goals. I want to become someone who creates solutions that are not just technically advanced, but also human-friendly. For example, in my research, I hope to design interfaces that present complex biological data in simple, visual ways so biologists — even those without programming knowledge — can understand and use the results.
- HCI is helping me grow empathy, clarity, and communication skills. These are qualities that I believe will help me become the best version of my dream self — a researcher who bridges the gap between advanced AI and real-world users.

My Semester Project

- This semester, I am working with a team on a project called **PathFinder**. It is a web application designed to help Computer Science students at SFSU with smart course planning. The app will also include chatbot support to make it more interactive and personalized.

- This project is close to my heart because I am a first-generation college student. During my undergraduate studies, I often struggled to figure out which courses to take next. I had to rely on asking friends or seniors for advice, which wasn't always clear or unbiased. I wished for a straightforward system that could guide me and suggest courses in a way that was simple and reliable.

- PathFinder is my way of solving that problem for the next generation of students. By the end of the semester, I want to build a working system that students can actually use. My goal is for future students to feel more confident and less overwhelmed when planning their academic journey.