

Supporting Independence and Learning to Collaborate

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From 13 July to 24 August 2026, I spent six weeks at the Soft Robotics Lab at the National University of Singapore, led by Professor Cecilia Laschi. Alongside Edoardo Tadini, a friend and fellow Laidlaw scholar, I contributed to a soft assistive robot designed to help people move from sitting to standing. My work focused on testing the robot with patients and then using their feedback and the test results to enhance its software, including machine learning and decoding. Yet, looking back, what stands out most is the human experience: learning to work with someone new, sharing everyday life, and becoming part of a team.

The project addressed a problem with consequences far beyond the laboratory. Singapore's ageing population brings growing challenges around mobility, independence, and care. Standing up from a chair can seem like an ordinary movement, but difficulty doing so can make someone increasingly dependent on others. Assistive robotics offers one way to support that independence while easing some of the physical demands on caregivers. This gave our work a purpose beyond getting a system to function: ultimately, the technology was intended to help people navigate everyday life.



Edoardo Tadini and me with the soft robotic arms at the NUS Soft Robotics Lab during our summer internship.

My main contribution was testing the robot with patients and then improving its software. During the trials, I observed people using the robot for the sit-to-stand movement and paid attention to how the system responded, as well as to their feedback. I brought those observations back to the software, working on its machine learning and decoding so that later tests could reflect what we had learned. Seeing the robot used by real people made the limits of simulation clearer and gave the technical work a direct human purpose. Edoardo worked on tactile sensing, and Buxiu, a Chinese student at NUS with whom we collaborated closely, focused mainly on 3D modelling. Our different roles complemented one another, and progress depended on understanding how changes to one part of the robot affected the others.

Working with Edoardo and working with Buxiu brought two different experiences of collaboration. Edoardo and I were already friends and had worked together at EPFL. We arrived with an existing relationship, a sense of how the other person worked, and the confidence to speak openly. That familiarity was reassuring in a new environment. We did not have to build trust from the beginning.

With Buxiu, that trust developed during the internship. We had not worked together before, and we brought different academic and cultural backgrounds to the same project. I had to get to know him as a person as well as a collaborator, rather than rely on the familiarity I already shared with Edoardo. The contrast made me more aware of how much an established friendship can make teamwork feel effortless, and how valuable it is to make space for a new relationship to develop.

Much of that happened outside formal work. The three of us ate together and cooked dinners, and these ordinary moments became an important part of the summer. They gave us time to talk beyond our individual tasks and become more comfortable with one another. Buxiu became someone with whom I shared the experience of being in Singapore, not simply someone working on another part of the robot. Our different backgrounds were part of that relationship, but they did not define it.

Spending six weeks in Singapore also gave me time to experience everyday life beyond the laboratory. Shared meals and evenings together became part of a routine, giving the internship a personal dimension alongside the research. I also travelled to Kuala Lumpur with Edoardo and other Laidlaw scholars. Seeing street motorcycle racing at 5 a.m. is one of my most vivid memories of the trip. Away from our projects, we had time to get to know the wider group, making those friendships part of the summer too.

One memory captures this especially well: the last night before our presentation. All three of us stayed up through the night working. There was still work to finish, and we were tired, but we were facing the deadline together. At some point, we enjoyed a very well-deserved McDonald's McFlurry. It was a small reward, yet it remains one of my clearest memories of the internship. The pleasure came as much from sharing that moment as from the ice cream itself. Although an all-nighter is hardly an ideal working routine, that night captured the companionship we had built.

This experience helped me see leadership as something practised through everyday collaboration. It involves communicating across different areas of expertise, being willing to ask questions, and helping create an environment in which people feel comfortable contributing. Working with an old friend and a new collaborator side by side made those lessons especially tangible.

I went to Singapore to contribute to a robotics project that could improve people's daily lives. Through our work on the soft assistive robot, I helped advance that goal, while learning far more about collaboration than I had expected. Working alongside Edoardo and Buxiu taught me how shared effort, trust, and friendship can bring people with different skills and backgrounds together. I left with both the satisfaction of contributing to a meaningful project and lessons about working with others that I will carry into future experiences.