

“Innovation is born when ideas from different fields are brought together”

by Janine Braun



Severin Hacker at the Student Project House. He studied Computer Science at ETH and completed his doctoral studies at Carnegie Mellon University in Pittsburgh, where he co-founded the language learning app Duolingo in 2011. Today he is the CTO of the company and invests in young tech startups.

© ETH Foundation / Valeriano Di Domenico 5 December 2023

Severin Hacker knows what he's talking about: the co-founder and CTO of Duolingo joined us for an interview and shared his thoughts about innovative ideas, the entrepreneurial spirit and unexpected connections.

Where does your enthusiasm for computer science come from?

SEVERIN HACKER – The sparks already started flying in my childhood (*laughs*). My family was one of the first ones in the neighborhood to have an Internet connection. Computer games in particular spoke to me, and I wanted to develop them myself. So I taught myself how to program and later studied Computer Science at ETH Zurich.

Afterwards you got your doctorate from Carnegie Mellon University, where you and your supervisor founded Duolingo together in 2011. How did that happen?

It was a “happy mistake”. In 2009, my supervisor Luis von Ahn and I were tackling a seemingly insurmountable problem: How could we translate 1 trillion English websites for people who speak other languages? At the time, the

Google translate service for websites only generated gibberish. And finding enough translators for this task would be impossible. So we changed our focus and tried to make language learning into a game. That's the story of Duolingo.

Today everyone with a smart phone and an Internet connection can use the app to learn foreign languages.

That's right – we wanted to give as many people as possible the chance to learn a language for free. Now we have over 74 million learners using the app every month around the globe, working through our courses in 40 languages.

Have you learned a language yourself using Duolingo?

Yes, I've used Duolingo to learn Spanish. I attended the wedding of my dissertation supervisor in Guatemala, and thanks to Duolingo, I was able to get oriented, read the newspaper and get a haircut.

Ten minutes with the app is as valuable to me as one hour of language lessons.

You're not only active as a businessman, but also as a philanthropist. Why do you support the Centre for Students and Entrepreneurs?

I really believe in the idea of bringing student and entrepreneurial initiatives together under one roof in order to bring exciting ideas to life – no matter how unconventional – and to develop technological solutions.

Why?

Recently I visited the Student Project House, the creative students' lab at ETH, which is also supposed to merge into the center. There was an immense wealth of ideas and enthusiasm on the part of the students, and that deeply impressed me. It's just as important to have the ambition to build something great and not to get sidetracked by false ideas of modesty. There are so many talented innovative people at ETH, and they should all fully unlock their potential.

I'm also convinced that innovation is born in places where ideas, concepts or technologies from different areas are brought together for the first time. Take the iPhone as an example: it combines a music player, a telephone and Internet access in one device. Even though each of these elements existed independently beforehand, it was the way in which they were combined that made the iPhone revolutionary. It's this combination of different components in a whole that has great potential for something new and novel.

Duolingo

Centre for Students and Entrepreneurs

Student Project House

explore more puzzle pieces

<https://ethz-foundation.ch/en/spotlight/awc-severin-hacker/>