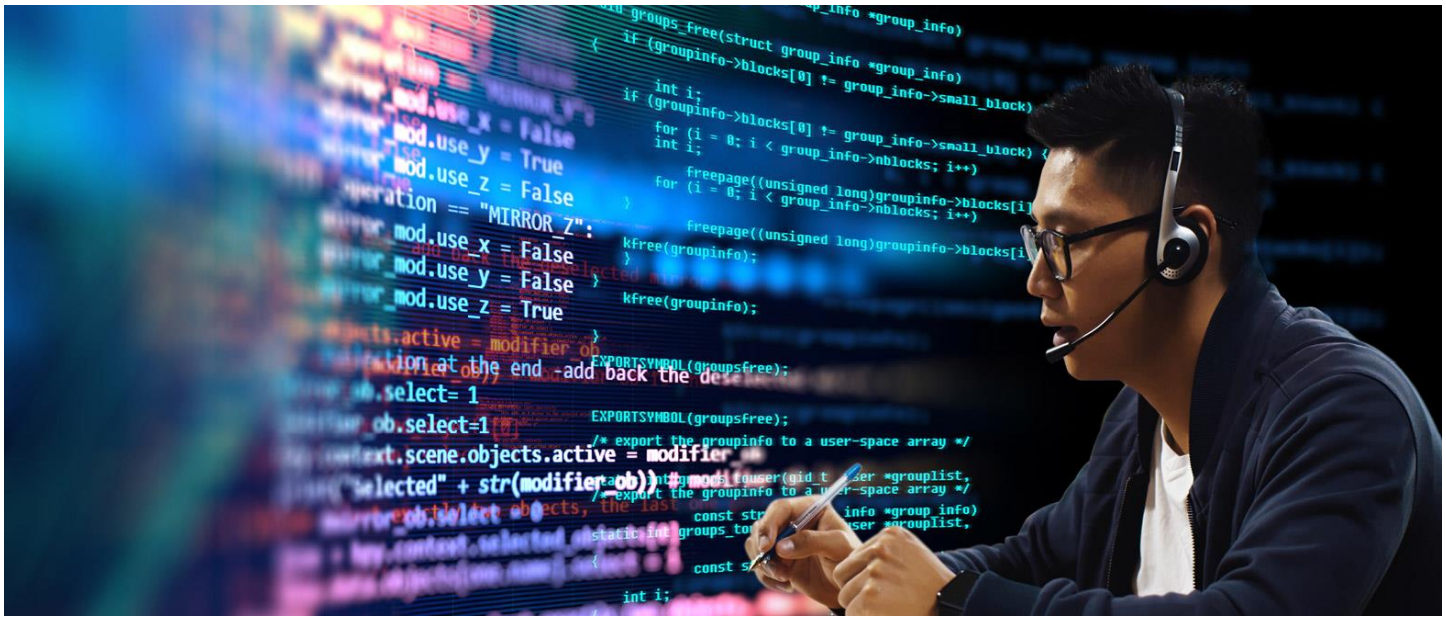
Peak performance – getting future-ready with tech bootcamps

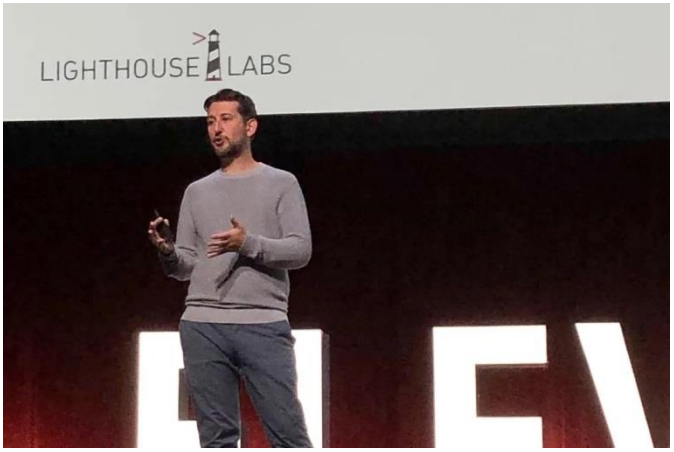


"Tell me and I forget. Teach me and I remember. Involve me and I learn."
Benjamin Franklin

In today's digital world, keeping up to date with constantly evolving innovations and learning new technology skills are an essential part of job market competitiveness. However, adult education has become prohibitively expensive, while more traditional models of professional learning can be slow to adapt to emerging trends, limiting career opportunities and development.

Many business leaders are frustrated by this growing gap between academic theory and business practicality. There is concern at the lack of business readiness of many successful graduates. In response, education itself is undergoing some major restructuring, with tech bootcamps increasingly seeming like a transformative solution. These bootcamps are helping people discover new technologies and navigate new ways of working, creating business leaders who are more at ease in a rapidly changing world.

Jeremy Shaki, CEO of Lighthouse Labs, Canada's preeminent coding bootcamp, has his own take on why there needs to be such a dramatic shift in how we learn about tech. "I actually don't care about tech very much at all", he smiles. "What I care about most is the missing infrastructure in adult education that actually allows people to make real career changes."



Lighthouse Labs specialises in intensive courses such as cyber security, data science, web development and data analytics, with AI playing a key role in their curricula. The tech bootcamp model focuses on hands-on and accelerated learning that teaches students job-ready skills. In 12 weeks, with each week consisting of 40+ hours of seminars and guided practice, amateurs can develop the skills necessary to become professionals in these fields. In a rapidly changing

technological and employment environment, Jeremy believes this way of learning better prepares his students for the future.

"One of the biggest things blocking adult education in general is industry accepting education beyond the university. This blocker is going to be terribly important to get past because I think it's going to be impossible to ask people to learn skills at the age of 18 that last them a lifetime. I think more than ever, the general population's interest in doing different things and changing in their lives is becoming more rapid."

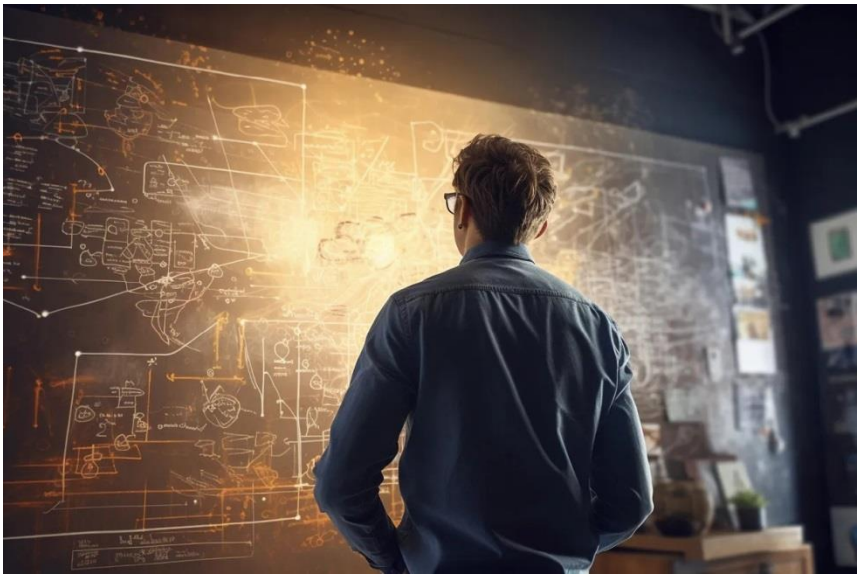
Now in his tenth year as co-founder, Jeremy has witnessed many changes in the business landscape as well as in his own company. "Our first mission was really simple, which was to create the next generation of software developers. But we kind of switched that five years in to a much bigger mission, which was ensuring that technological change is an opportunity for all", he says.

This egalitarian approach is important to Jeremy and to Lighthouse Labs' ethos. Leaning forward, he continues: "As tech changes regularly, it can either be something that sets up a bigger digital divide, or it is actually an opportunity for more people to enter because nobody has the knowledge and experience that it takes to do the next thing."

Even so, it takes hard work, motivation and a great deal of flexibility to succeed in a tech bootcamp. "It's the idea of learning by doing. It's like Sherpas going up Everest. It's guiding people, but they still have to do the climb if they want to get to the summit."

So how does Jeremy see the differences in his company's model as opposed to more traditional models in education? "The adult segment of continuing ed' is very much, 'Here's the content'. The curriculum and the tests are set to say, 'Did you learn the material we taught you?' and if you succeed in that material, you are said to be good enough.

"Our model basically prefaces that if you're self-motivated and you're ready to be uncomfortable, we will challenge the hell out of you. Not for the sake of just learning the material, but learning how to learn at an aggressive pace. The stuff we're feeding you and the way you learn is very aligned with how the industry expects you to learn in their way – not just the pace, but the method."



The usual criticism of online learning highlights the lack of collaboration and engagement; the limited opportunities to network and form connections; and the absence of any immediate feedback. How do Jeremy and his team deal with these challenges?

"We are fully remote, but we're live, meaning you have to show up", explains Jeremy. "This isn't an asynchronous learning approach. It is evaluated. We are 'learning by doing', so people are together pretty much all day. We've had to build a very strong remote experience in how people engage and collaborate at all times. We have tools such as Slack and Discord, as well as our learning management system, Compass, so there is a lot of engagement. However, the number one thing that works for remote education is making people understand that they count when they are there."

Enhancing collaborative learning in adult education

Creating this sense of presence and collaboration, which is central to the Labs' philosophy, is key for developing connections for remote/hybrid workers. Working together with peers can enhance learners' understanding of complex concepts and help them gain diverse perspectives and develop problem-solving skills.

Jeremy adds: "The thing that bonds people is how they work on something together. The more you are doing something that is really challenging and the other people are helping and you're all in it together, the more the bond is formed." They must be doing something right – one couple that met online at the school recently got married.

Of course, every learner has different aptitudes, drivers and goals. Educating so many different people to the same high standard would take a seismic change to the education model. It's a good job then that Jeremy and his team have had a decade to nurture such an ecosystem.

Demystifying AI's role in education and skill development

Speaking of tech. Let's talk about the glowing blue brain in the room. What is Jeremy's take on AI?

"AI for sure is a little bit of a bogeyman right now in terms of, 'What is it and what is it doing to the industry?' But I can see that AI isn't replacing jobs yet. I keep joking with everybody that if AI had walked in the door in 2021, we wouldn't be talking about anything to do with job replacement. We would be talking about accelerants for everybody, because they couldn't get enough talent to get to the point that they wanted to get to."

If anything, embracing AI is essential in preparing learners for the future job market, enhancing critical thinking and empowering individuals to bridge the digital divide.

Jeremy certainly agrees. "Everybody graduating right now should be leveraging AI to make them accelerate, but the key is the way you use it and the way you don't use it, and not using it at the cost of learning", he says. "If we have students who are using AI in our programme just to get past a project and get a good mark, they will fail in the job market. That is education's biggest problem at this moment. Anybody that rejects the use of AI in their programmes is not setting up a job-ready individual."

Increasing the pace of talent development

This belief in bridging the tech skills gap is central to Jeremy and his team's methodologies. With the hiring of external talent also becoming increasingly expensive, Lighthouse Labs' corporate workforce training programmes are helping their enterprise partners – including Nike, Toyota, McKinsey and Expedia – fill vacancies quickly and more cost-effectively. Last year saw 82% of the Lab's learners placed in a role within 180 days at companies such as Capgemini, Digital Lab and Bell.

Agility – check. Immersion – check. So, what about the... cheque? With spiralling costs across tech education – caused by the rapidly advancing technology itself as well as the changes to infrastructure – how are Lighthouse Labs able to keep the costs down?

"The way we get our value is by being more particular about the 'who', not thinking that the best model is to teach everyone at every part of their learning journey. It's actually honing in on what you do extremely well, understanding who your core employers and students are, and knowing that that's who you're designing for. Then you can allow everybody else to come into play and enjoy that experience and be very explicit about what you are. That allows us to spend the money on updating the curriculum."

Technological advancements are constantly evolving the modern workplace and have created a high demand for individuals with the tech know-how in streamlining processes, automating tasks and leveraging digital tools and platforms. Businesses value employees that can contribute to digital transformation projects, drive innovation and are ready for emerging technological trends. These valuable competencies can open up new career paths and new opportunities. Indeed, as Jeremy says, "How people use entry-level skills in new fields and new spaces is going to be vital for creating talent at more rapid rates – and that's what we do."

Whatever new mountain learners have chosen to climb, broadening their horizons and learning new skills are crucial to development. The prospect of progressing your career is exciting, but the path can be demanding. It's probably best to find the right guide... and hang on tight.

The story of Lighthouse Labs shows how workforce training is adapting to meet the challenges of the twenty-first century, empowering professionals to thrive in an ever-changing job market. Learn more about the role that VR technology is playing in that transformation.