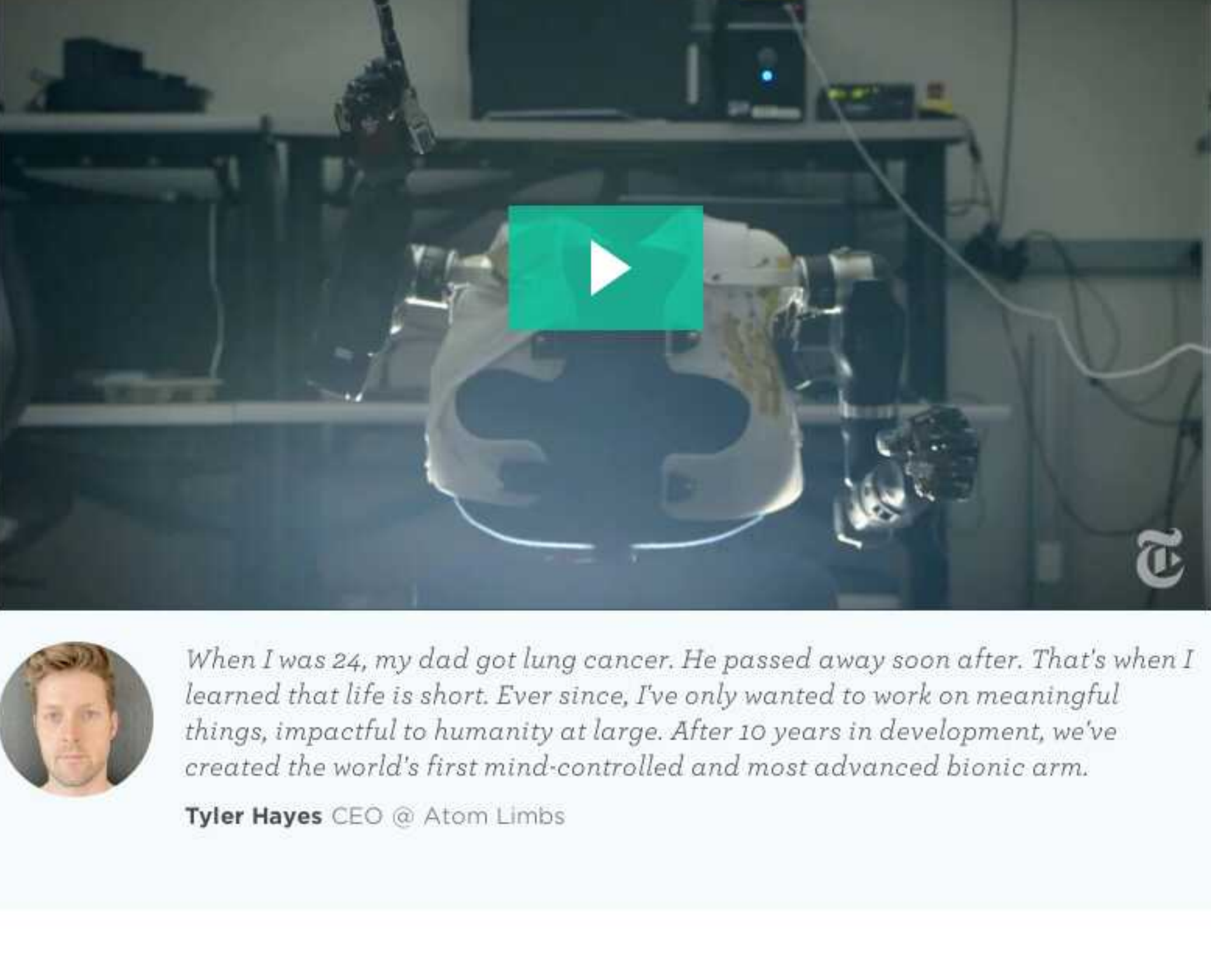


Atom Limbs

The world's 1st mind-controlled bionic arm

ATOMLIMBS.COM SAN FRANCISCO CALIFORNIA



When I was 24, my dad got lung cancer. He passed away soon after. That's when I learned that life is short. Ever since, I've only wanted to work on meaningful things, impactful to humanity at large. After 10 years in development, we've created the world's first mind-controlled and most advanced bionic arm.

Tyler Hayes CEO @ Atom Limbs

Why you may want to support us...

- 1 Full arm, hand, and finger dexterity. 200 sensors (100x more than competition).
- 2 CEO prev. cofounder of Bebo (acq. by Amazon). Team: Johns Hopkins, Apple, IDEO, Intel, NASA.
- 3 \$120M grant from US from DARPA used for research in the last 15 years.
- 4 In development for 10 years. Tried by 20 amputees/quadruplegics, military, teleoperations.
- 5 Backed by VILLAGE Global who has LPs that include Bill Gates, Reid Hoffman, Jeff Bezos.
- 6 Founding team includes co-inventors of iMac and da Vinci Surgical System

Why investors ❤️ us

WE'VE RAISED \$150,000 SINCE OUR FOUNDING.

Our team

AND OUR MAJOR ACCOMPLISHMENTS



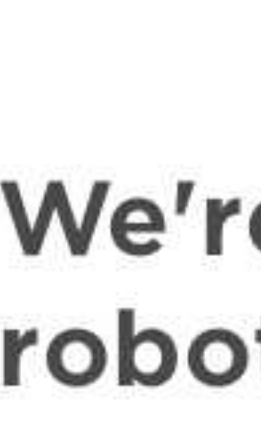
Tyler Hayes
CEO
Previously co-founder of Bebo (acquired by Amazon). Neuroscience at St. Olaf.



Doug Satzger
CDO
30+ years leading Industrial Design at Apple, IDEO, Intel, and Palm.



Joe Moak
CTO
20 years leading engineering at NeuroPace, St. Jude Medical, Seismic, Apple.

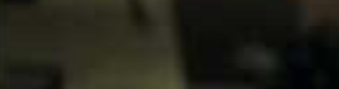


Mark Salada
CRO
20+ years robotics & haptics at Intuitive Surgical, NASA projects at Johns Hopkins APL, and Apple.



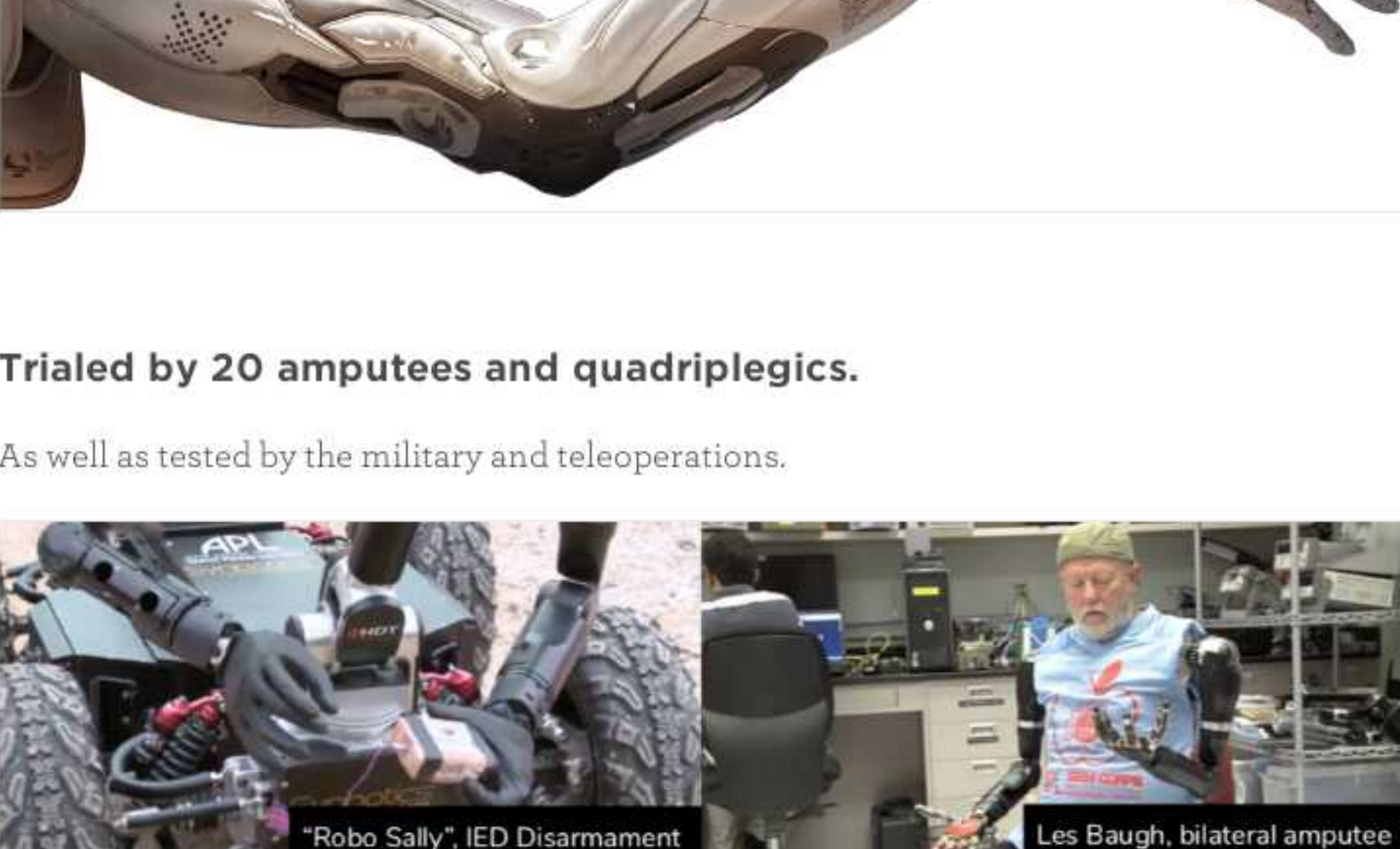
Bobby Armiger
Original inventor
Principal engineer on prototype. Applied physicist at DARPA and Johns Hopkins APL.

In the news



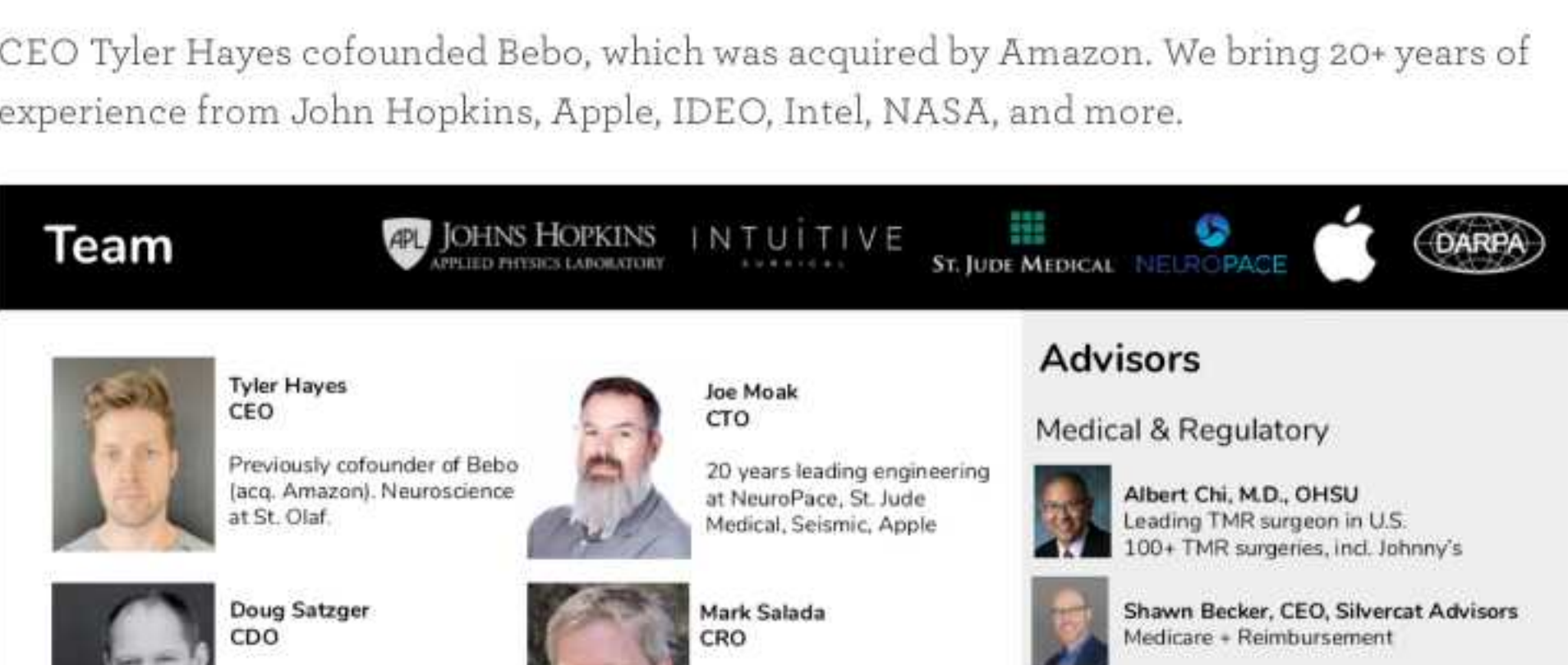
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We're building the most advanced robotic arm in the world.




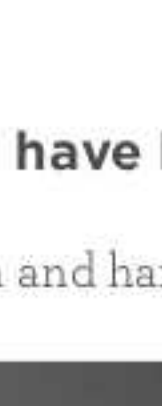








Tried by 20 amputees and quadriplegics.

As well as tested by the military and teleoperations.



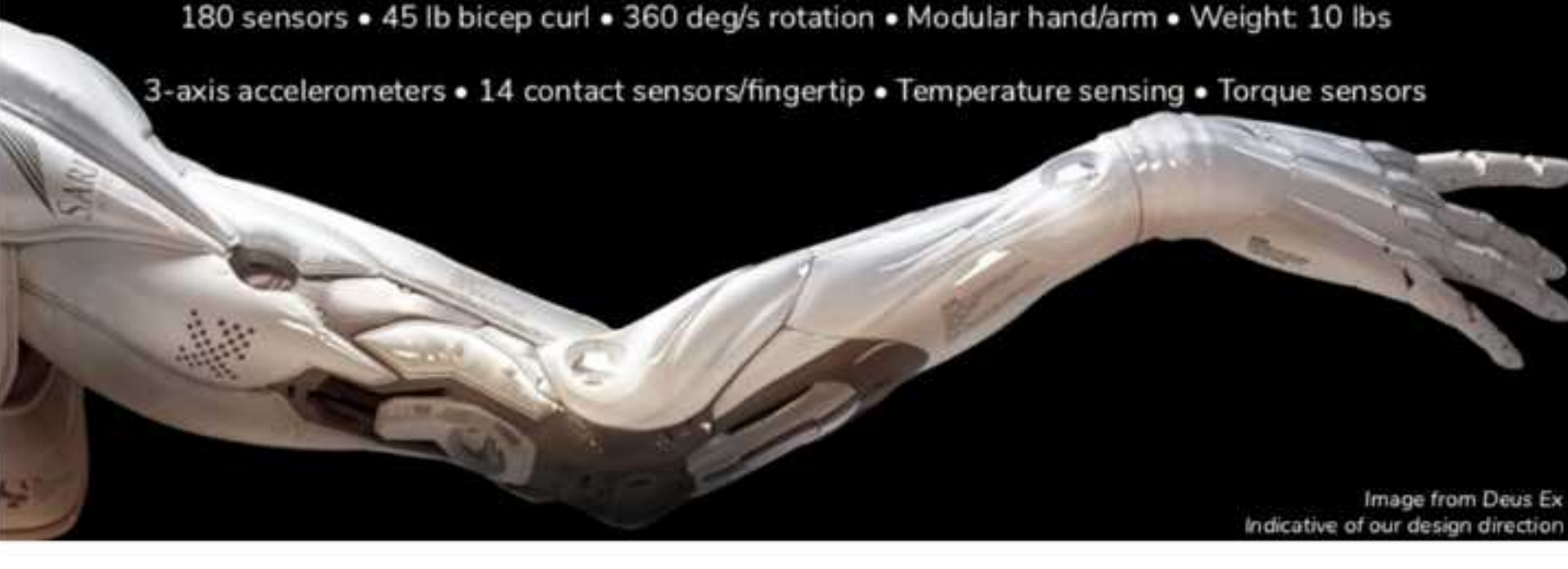
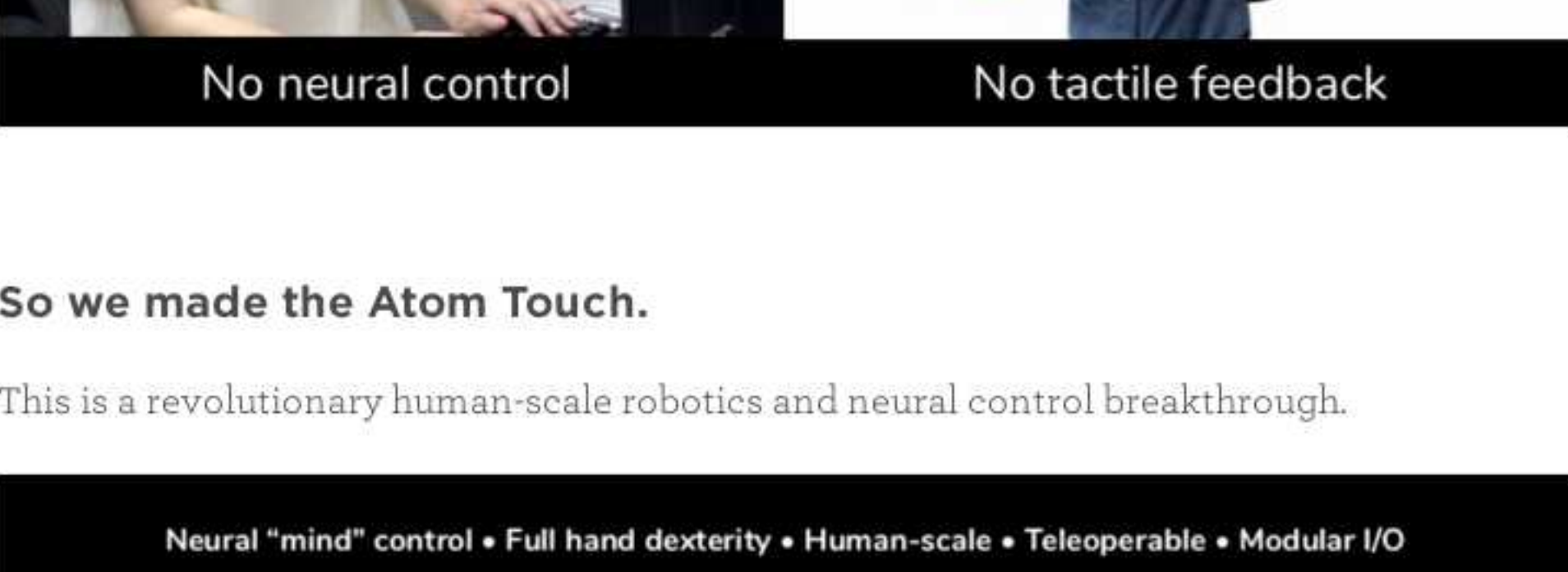
We have the expertise to build this.

CEO Tyler Hayes cofounded Bebo, which was acquired by Amazon. We bring 20+ years of experience from John Hopkins, Apple, IDEO, Intel, NASA, and more.

Team			Advisors	
 Tyler Hayes CEO <i>Previously cofounder of Bebo (acq. Amazon). Neuroscience at St. Olaf.</i>	 Joe Moak CTO <i>20 years leading engineering at NeuroPace, St. Jude Medical, Seismic, Apple.</i>		 Albert Chu, M.D., OHSU <i>Leading TMR surgeon in U.S. 100+ TMR surgeries, incl. Johnny's</i>	
 Doug Satzger CDO <i>20+ years leading Industrial Design at Apple, IDEO, Intel, and Palm.</i>	 Mark Salada CRO <i>20+ years robotics & haptics at Intuitive Surgical, NASA projects at Johns Hopkins APL, and Apple.</i>		 Shawn Becker, CEO, Silvercat Advisors <i>Medicare + Reimbursement</i>	
Original inventors			 Jared Seehafer, CEO, Enzyme <i>FDA + Clinical Trials</i>	
 Eric Fausling <i>Lead robotist on prototype, Chief Engineer at HDR.</i>	 Bobby Armiger <i>Principal engineer on prototype, Applied physicist at DARPA and Johns Hopkins APL.</i>	Defense	 Navy Cmdr Jonathan Furberg, M.D., Ph.D. <i>Director, Crossintegration Program, Department of Defense</i>	

Robotics arms today still have limitations.

They can't do what a human arm and hand can do.



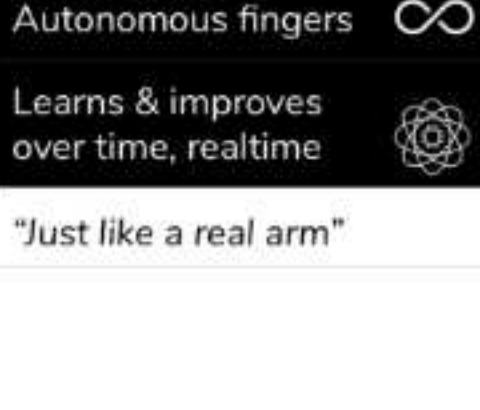


So we made the Atom Touch.

This is a revolutionary human-scale robotics and neural control breakthrough.

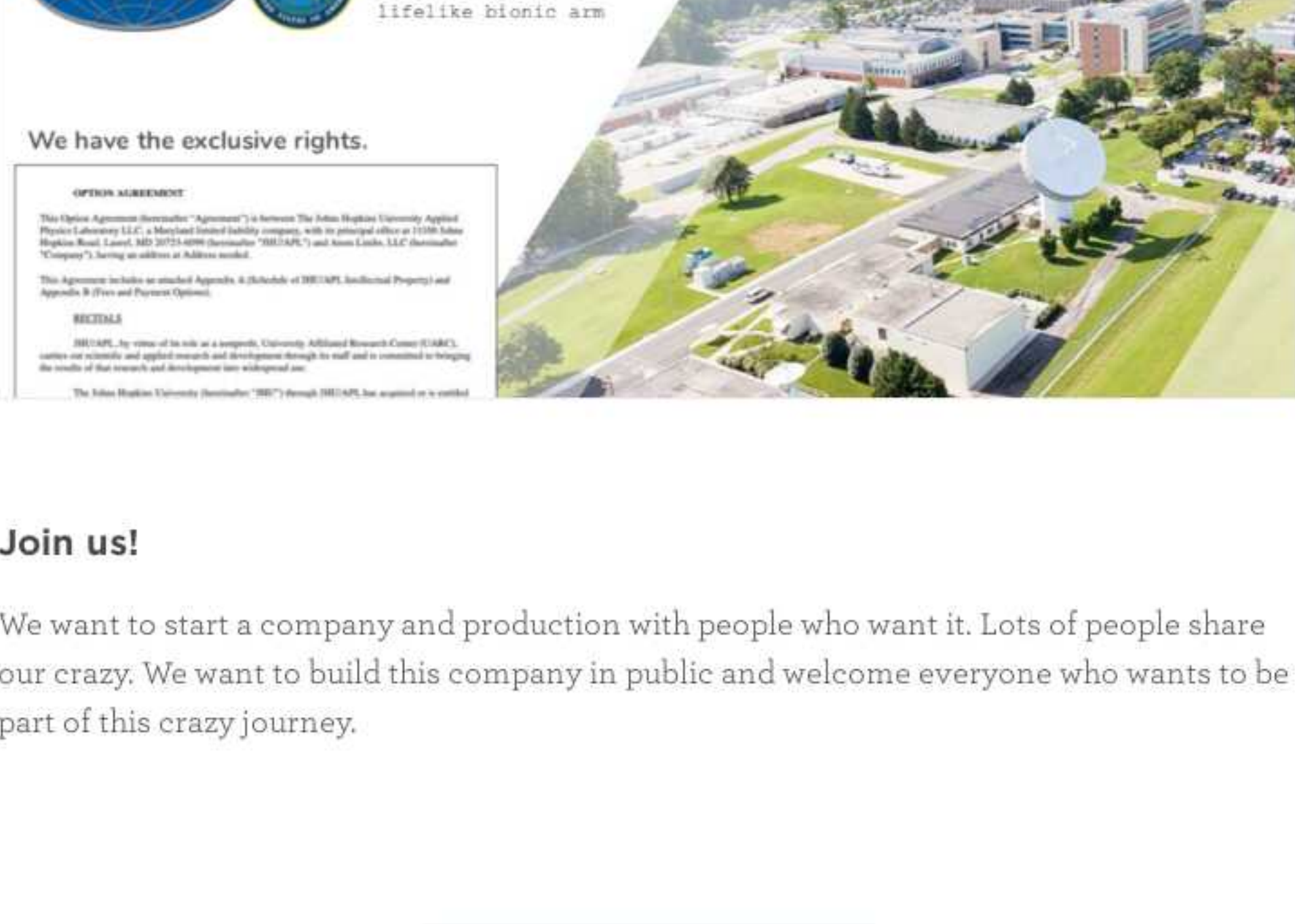


We're better than competition.

Prosthetic competitive landscape			
	Commodity hands		Premium arms
Controls	Flex bicep/tricep	Controls	Flex bicep/tricep
Reliability	Not waterproof Breaks easily	Reliability	Not waterproof Robust
Dexterity	Only 15 grips No individual fingers	Dexterity	Only 10 grips No individual fingers
Smart	N/A	Smart	N/A
			Atom Touch
			Mind-controlled
			IP67 rating
			Military-grade tech
			Infinite grips
			Autonomous fingers
			Learns & improves over time
			Real time
			"Just like a real arm"

And we received a \$120M grant from DARPA.

...the US Defense Advanced Research Projects Agency.



Join us!

We want to start a company and production with people who want it. Lots of people share our crazy. We want to build this company in public and welcome everyone who wants to be part of this crazy journey.

Investor Q&A

What does your company do?

Atom Limbs is creating the world's first mind-controlled and most advanced bionic arm. To start, we're selling it to amputees and people who suffered limb loss. We're in conversation with several non-med robotic organizations too — from agriculture, deep sea, hazardous environments, factory ad hoc assembly, and more. We are currently moving from the clinical stage to the commercial stage, aiming to ship to the market in 2022.

Where will your company be in 5 years?

In 5 years, we hope to have sold 1,000 of our initial Atom Touch arms (\$100K-\$300K each). We hope to be moving to the Atom Touch V2 at a lower price point (\$30K-\$50K). We want to emphasize that the Atom Touch arm is poised for both medical and non-medical markets. These future projections cannot be guaranteed.

Why did you choose this idea?

When I was 24, my dad got lung cancer. He passed away soon after. That's when I learned that life is short. Ever since, I've only wanted to work on meaningful things, impactful to humanity at large. After 10 years in development, we've created the world's first mind-controlled and most advanced bionic arm.

Why is this a good idea, right now? What changed in the world? Why wasn't this done a few years ago?

The time is now. It was literally impossible to make Atom Limbs a few years ago. We are the only ones to have invented this.

Firstly, the cost of production was too high — at about \$1M per bionic arm. Now, this cost was brought down due to technological advancements and our prototyping.

Secondly, machine learning (ML) was good before but not at the level to achieve what we've achieved today. ML and artificial intelligence (AI) play a massive role in how this arm works as well as it does. A person just needs to put the bracelet around their residual limb and think about where they want to move before their muscles send nerve signals to the arm, thereby moving it.

How far along are you? What's your biggest obstacle?

We've been working on this bionic arm for over 15 years. We received a \$120M grant from DARPA (the US Defense Advanced Research Projects Agency). Since then, 20 people have used the arm ranging from one day to one year for our take-home studies. Early clinical trials show that the arm performs better than the existing alternatives.

Who are your competitors? Who is the biggest threat?

Our competitors are the years away — we've got time and money on our side with 15 years in development and the \$120M grant from the government (DARPA).

That said, we would group our competition into two categories:

1) Alternative prosthetic arms for amputees: Notably, Ottobock and Ossur, which are both European-based. These two companies represent 80% of the prosthetic market in the world. They do not innovate themselves, but rather acquire smaller companies.

2) Other advanced robotic hands. Quite frankly, the hand is the hard part as it needs fine control. Shadow Robot (just a hand, not an arm) is one competitor with good dexterity. However, you can't give it to an amputee — as an academic research hand, it isn't robust for the public yet as water and dust can get in it and it breaks immediately. Other competitors include Universal Robots and Miso Robotics. However, they merge an arm and a hand to have a robot cook for you in the kitchen, which is struggling to sell.

All in all, there are arms out there, however, they are not mind-controlled. They are not intuitive and amputees often complain about them. They can't control their fingers and plus, the arm breaks easily and takes weeks to fix. Bionic legs are widely adopted, but arms are much harder to adopt — so we're changing that.

What do you understand about your business that others don't get?

There's a giant gap in the prosthetic industry today between leg and arm prostheses. These two are VERY different markets. 4 in 5 leg amputees use their prosthetic leg. However, only 1 in 5 arm amputees use their prosthetic arm. This is bad. Arm amputees can't do very much.

How will you make money?

We will make money by selling the product to medical markets at \$100K per arm with 50% margins. This is roughly in line with competition today (\$50K-100K). This will be billed through insurance, so no one will pay out of pocket. In the future, we plan to reduce this cost.

For non-medical markets, we're expecting 100K / arm.

What are the biggest risks? If you fail, what would be the reason? What has to go right for you to succeed?

Our biggest risks involve execution and insurance.

1. We must continue to get the cost for each arm down and get enough funding to continue to advance the arm.
2. In the medical market specifically, we need to get FDA approval and have each arm reimbursed by insurance.

That said, we are working hard to get funding and continue innovating. Also, we're confident that FDA approval is not a real risk as there are plenty of prosthetic arms today that have been approved.

The hard part about getting insurance to reimburse people for each arm is how much time it will take for the arm to be popular so that insurers will want to reimburse it at large, instead of individual claims. The best strategy for us will be to show insurers the data through future clinical trials. We'll have to show that our bionic arm works and is better than competition.

All in all, it'll take 1-2 years to go to market and another 1-2 years to get this data. We're looking for investors to see our vision for the future.

What do you need the most help with?

If you know someone who has experienced limb loss, please tell them about Atom Limbs. We want to let every amputee in the US know that this arm exists.

What would you do with the money you raise?

With the \$2M fundraising goal (including funds raised through Wefunder and off platform), we plan on spending 50% to double our team from 6 to 12-15 people and spending 50% to go towards development.

We plan on hiring more roboticists. In the next 12-18 months, there are 3 milestones we wish to accomplish:

1. Finish the IP transition from John Hopkins to Atom Limbs.
2. Get the line of sight to production intent prototyping (i.e. finish CAD drawings, sketch files, foam prototypes).
3. Do user testing and get more feedback.

Have you been FDA-approved?

We have not yet been FDA approved.

What does going to market look like?

We'll need \$30M in total to go to market. This will be on top of the \$120M from DARPA.