Interview: Chen Hao – Founder & CEO, Imsight, China



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13.07.2018

Tags: China, Imsight, Medtech, Medical Imaging, AI

Dr. Chen Hao is the CEO and founder of the promising startup Imsight, the only company focusing on medical imaging analysis using Artificial Intelligence technology in the Greater Bay Area. In this exclusive interview, the young and ambitious entrepreneur explains how Imsight's research-driven solutions will revolutionize the relationship between doctors and patients.

While Imsight is a start-up using AI in the medical field, your background lies in engineering and computer science. How did you come to found Imsight?

While my major was indeed in computer science, my PhD research was however touching upon artificial intelligence applied to medical analysis. In fact, I have worked on over thirty projects during my PhD study, all related to medical analysis. When I graduated from my PhD in 2017, I had a strong desire to explore how far AI technology could go in the medical field. Moreover, as more medical diagnostics testing centers were becoming available in China, I quickly realized AI technology could be transferred into clinical practice. This is the reason why I decided to move into this industry.

I could have joined the San Francisco based company, Enlitic, the first medical imaging analysis company using artificial intelligence that I visited four years ago. However, the fact that the US did not collect much data and that its hospitals were very cautious with data collection, made me reluctant to start in this market.

Instead, I realized it was the right time for me to start my company here, as our government and also Chinese hospitals in general are now extremely curious and eager to try AI technology. In fact, AI is a key priority for the national strategy, and healthcare is one of its three main applications, alongside surveillance and drive-less cars. With our headquarters in Shenzhen and a branch in the Hong Kong Science and Technology Park, Imsight is today, one of the fastest growing companies using AI for medical imaging analysis in Greater China. Not only unique in the field, we are also growing extremely fast, already raising RMB 100 million (USD 15.7 million) from Shenzhen Capital Group and Lenovo Capital.

Moving from academia to the fast-moving world of business must have been a learning journey. What are the key lessons you have learnt in the past two years of managing Imsight?

Firstly, I realized how remarkably different those two worlds are. Indeed, while academia allows a lot of time to work hard in order to obtain the highest accuracy and precision possible, the business world imposes time constraints and compromises; I learnt to change my mind and attitude in that respect. Secondly, I rapidly picked up industry conventions and lingo, adapting to doctors' requirements, whose framing and perspective are often very different from academia. Hence, I learnt to speak the language that doctors speak. Thirdly, the challenge was to think through a business model, one that is successful enough to keep the company running. This is all the more essential when a company like Imsight is growing at such a fast pace. While we started with only ten employees last February, we have grown to sixty-five today and will double the team to 120 professionals at the end of this year.

Nevertheless, I still have one foot in both worlds: I still spend ten percent of my time at Imsight doing research. Such emphasis on R&D is actually what makes Imsight truly unique in the sector. In fact, seventy-five percent of our employees are dedicated to R&D and work closely with universities. Furthermore, our Chief Scientist is Professor Pheng-Ann Heng, managing a group of thirty PhD students in medical image analysis – I was one of them, one of the largest groups of its kind in South East Asia. This is thanks to him that I could work on such a variety of projects and realize how far AI technology could go during my PhD study.

[Featured_in]

A lot of tech companies are moving into healthcare, from the giant American Alphabet (Google) to the large Chinese Tencent. However, the biggest challenge for them is that they often lack knowledge of the healthcare industry and do not know how to speak to

medical doctors. How can they tackle those issues?

This is how we can help them – we are in fact already starting a collaboration with Google. While eager to enter China, the American giant however has no clue how to support the local teams, without mentioning the brand remains to be trusted in China. We are therefore in discussions to identify how we can integrate their technology and successfully deploy their project into the Chinese hospitals. Thus, this is the way we create a bridge between the West and China.

I would even say Imsight is the flagship of the Greater Bay Area in the sector, since we started in Hong Kong, and now mainly based in Shenzhen, with offices in Chengdu and Beijing. Furthermore, we are expending to South East Asia, and also to Australia at the end of this year, developing an independent medical center there.

How do you convince doctors your platform fits into the existing clinical practice and can benefit them instead of replacing them?

It is true the technology may have raised some concerns in the very beginning. Despite such initial apprehension, doctors are now showing great curiosity and are eager to try the technology, notably thanks to strong government support, as mentioned earlier. The key is now to educate them on how this technology can best support them, and how our products can empower them. The unfortunate reality is that China only has ten thousand certified pathologists, when the country actually needs a hundred thousand of them, according to World Health Organization (WHO) standards. Hence, doctors here are so overloaded that they do not have a lot of time to really speak to patients and understand their personal situations. Our solution is therefore a powerful tool to help them improve quality of care.

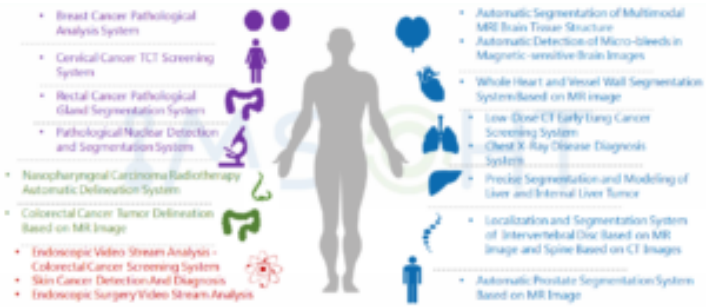
So far, Imsight is collaborating with over a hundred hospitals and we deploy our products in more than thirty of them. Usually in China, hospitals can obtain reimbursement of the solution from the government. Although business models do vary between regions we are based in, all the solutions we provide are suitable for doctors worldwide.

Does Imsight provide a unique AI platform that can be customized with different types of screenings, or does it sell multiple systems separately?

We mostly provide separate systems. However, we do have one smart radiology analysis platform – for all modalities such as MRI or X-rays, as well as a different platform for pathology, because they are two different departments.

This is still the early stage for our products though, as they only serve functions such as lung or cervical cancer prevention. We do not offer a complete and independent solution yet, which is our ultimate goal. We are still going through clinical trials, and expect to be commercializing by the end of the year. We are currently applying for CFDA approval.

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Can you tell us more about you plan for international expansion?

Our plan for the end of this year is to start selling products to Australia, Singapore and Indonesia. However, we still need to go through their local regulations and procedures. We will mainly distribute our products rather than build affiliates, as the latest is usually a higher burden. When it comes to the Australia market however, we might set up a small admin team there.

The development team will remain in Shenzhen and Hong Kong, as the Greater Bay Area is a fantastic place for innovation, the local government being very supportive. Last week for example, the Chairman of the Shenzhen Innovation and Technology Commission visited our company, which immediately helped to connect with several more hospitals.

What do you plan to achieve in the next five years?

We want to be the Sensetime (AI unicorn in computer vision) for medical imaging, which means we aim at being the next unicorn for AI in medical imaging. Till now, whether we will IPO or seek buyers, we have not decided yet. We remain open to any opportunity!

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