

## Humense

### Volumetric Virtual Reality to be as common as Skype

Humense was founded in November 2015 and in its first year attracted funding from San Francisco based CRCM Venture Capital with Youku and Alibaba executives at the helm. The volumetric Augmented (AR) and Virtual Reality (VR) technology provides a sense of being with another human via digital means instead of just seeing them. CEO Scott O'Brien summarised Humense's initial focus on entertainment, education and eCommerce with significant partnerships in place. The long-term play being global holographic telepresence reforming communications, transport, property and redefining population distribution and geo-economic clusters.

## Background

Humense was founded in November 2015 by CEO Scott O'Brien who brought a decade of industry experience including delivering 100+ apps and high end AR and VR similar to Hololens and Magic Leap eyewear. Humense is a team of 6 with 3 PhDs covering computer vision, signal processing and deep learning. The company has received recognition for its commercial, world-leading technology and has a strong entertainment and education pipeline.

## Volumetric is the real future of Augmented and Virtual Reality

360 degrees spherical video has been the method of filming and display most commonly used for so-called VR. The result is a head-locked experience wherever the camera was placed. Volumetric filming and display allows viewers to move around a scene and people, and for each asset to have its own physics, lighting and psychology. Volumetric experiences are therefore predicted to surpass 360 spherical in the coming few years. VR is expected generally to surpass the TV industry within a decade. The key to successful volumetric is software and hardware tools with low user barriers, data efficiency, low latency distribution and authentic display. Volumetric video of humans can involve multi-viewpoint sensors taking image and depth data ideally assisted with deep learning. Data is acquired from an asset/human corresponding textures, related depth and relighting ability for the destination scenes in a way the brain accepts as authentic. This is a strong barrier to market. With volumetric, the viewer may become a participant or director. Volumetric via ARKit and ARcore can serve 900M+ mobiles.

## Business Model

Initial use-cases are music, movies, sports 'meet the fans', location based entertainment, drama and workplace training but as the technology develops and reaches critical mass then ordinary people can use it to connect and interact with work colleagues, family and friends across the globe, fulfilling Humense's goal of impacting 1B+ people by 2025.

### Share details

Pre-Seed round	\$700,000
No of shareholders	<10

### Size of market

Augmented and Virtual Reality to be worth US\$120 billion by 2020. Holographic telepresence expected to be greater than a USD\$1trillion market over the next decade.

### Upside Case

- Global market opportunity with global partnerships in place
- A product described as the future of VR
- Highly skilled and Australian based team that has worked on 3D scanning for Hollywood, developed math for military radar and commercialised related high end product

### Downside Case

- Competition and re-educating the market – for example 8i, MSFT
- Time to commercialise
- Fast moving technology leads to short product lives

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