

Holostream: A Novel Method for 3D Digital Communication

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Categories:

- Computer Technology
- Mechanical Engineering

Keywords:

- 3D Imaging
- Computer Technology
- Digital Communications
- Mechanical Engineering

Telecommunications has changed vastly over the years with improvements in our technology as our understanding of the subject grows. From the early days of the telegraph to the modern times of cellular phones and video calling, the advancements enhance the users experience by improving interactions. What all of these technologies fail to do, is to immerse the user in the 3D world which we live in. Recent technologies have started making it possible for 3D video communication with specialized hardware, but it's expensive, inflexible systems, and required highly powerful computers.

Researchers at Purdue University have developed a novel technology allowing for high accuracy and resolution 3D video communications. This technology is possible through the use specialized 3D capture sensing hardware system in conjunction with new methods for 3D video compression and decompression along with a phone application for 3D video visualization. The compression and decompression methods allow for reduced data transfer, and less stress on the device while the application allows for 3D streaming and visualization. Additionally, this product will be available across any standard wireless networks.

To view a video related to this technology, click on this link: <https://www.youtube.com/watch?v=NhSbWqEcmQg>

Advantages:

- Designed for modern cell phones
- Higher accuracy and resolution
- Novel compression and decompression methods

Potential Applications:

- 3D digital communications through mobile networks
- 3D visualization application for phones

People:

- Zhang, Song (Project leader)
- Bell, Tyler

Intellectual Property:

Application Date: March 25, 2019

Type: Utility Patent

Country of Filing: United States

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