



THE BUSINESS PARTNER
FOR YOUR IDEAS



MISTREAM: LIVE CROWD STREAMING

COMPUTING

Software enabling the creation of a cellular wide-area network through Wi-Fi Direct. Facilitates robust, high-quality, multi-user live crowd-streaming.

TECHNOLOGY TYPE

Communications & Networks

STAGE OF DEVELOPMENT

- Prototype developed and tested.

- Designing user-friendly system and application.

IP PROTECTION

U.S. Utility Patent Pending

Method and System for Data Streaming

US20170289215A1

LEARN MORE

Reference Number: U-5934

Dean Gallagher

Technology Manager
dean.gallagher@tvc.utah.edu
801-585-0396

TECHNOLOGY SUMMARY

Live-streaming is growing in popularity with the rise of applications like Facebook Live, YouTube, Meerkat and Periscope. Yet, live-streaming has limitations: video streaming often requires large amounts of bandwidth, resulting in lower quality video/audio and loss of signal.

mIStream splits streaming cellular data to numerous forwarder cells which then transmit the data via multiple cellular paths. A gatherer then combines the multiple streams of data to seamlessly recompile the original stream. This creates a more robust signal network, allowing high-quality, higher-bandwidth streaming despite individual cellular data limitations and fluctuations. Having forwarder nodes on multiple cellular networks reduces dead zones and improves the overall throughput.

FEATURES AND BENEFITS

- Provides a more stable video conversation experience as the number of diverse cellular providers in the network increases.
- Minimizes fluctuations in streaming quality.
- Total aggregate throughput increases as more cellular connections are used.

RECENT PUBLICATIONS

Lundrigan, P., Khaledi, M., Kano, M., Subramanyam, N. D., & Kasera, S. (2016). Mobile live video upstreaming. *2016 28th International Teletraffic Congress (ITC 28)*. doi: [10.1109/itc-28.2016.124](https://doi.org/10.1109/itc-28.2016.124)

INVENTOR PROFILE

Sneha K. Kasera, Ph.D., [Professor – School of Computing](#)

Philip Brandon Lundrigan, Graduate Research Assistant – School of Computing

DATE UPDATED: 7/25/2019