

Robust Video over Wireless

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The Research Groups



Research Topics

Coding Theory

Complexity Theory

Computational Number Theory

Multiple Antenna Wireless Research

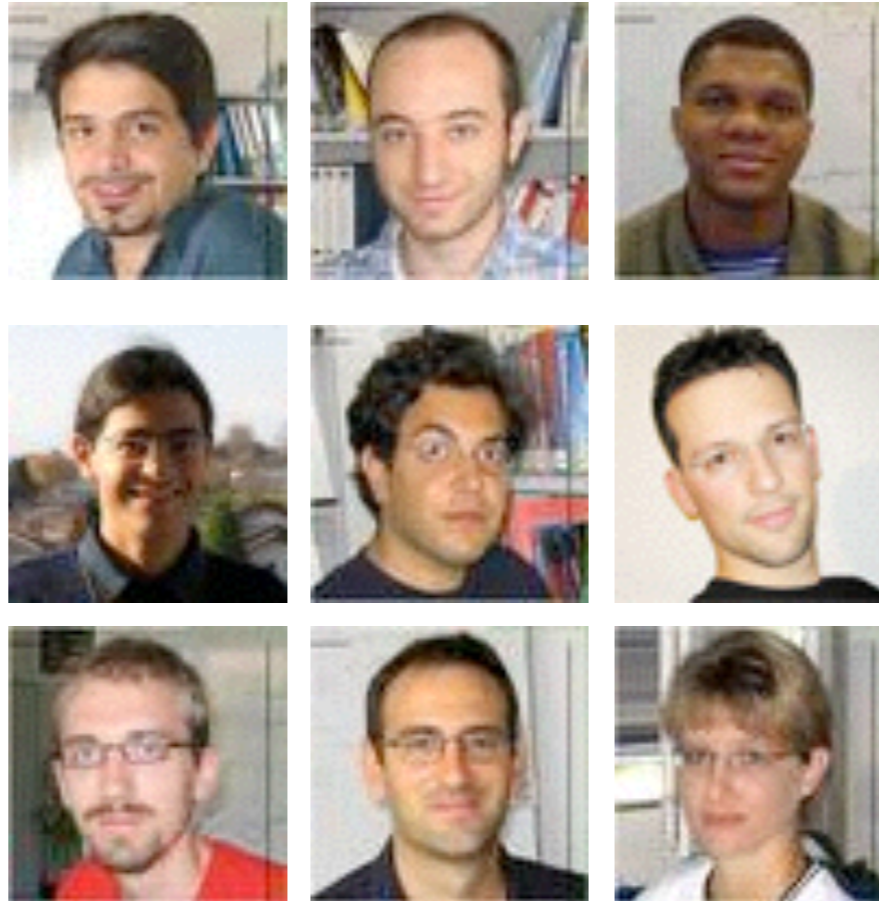
Output

More than 150 publications (among them several books)

Around 15 pending and granted US and international patents

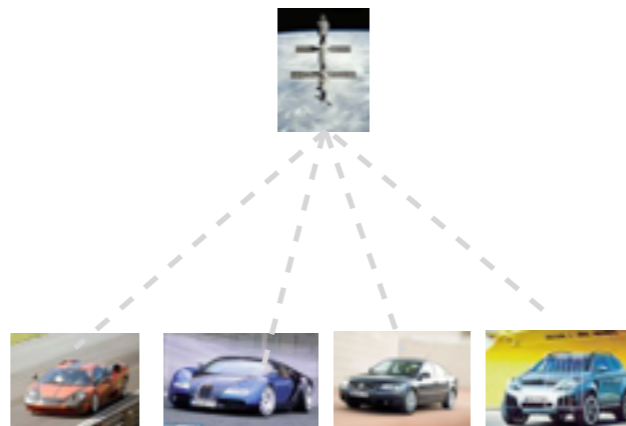
Industrial collaboration with Digital Fountain, Inc

Members



Practical Coding Theory

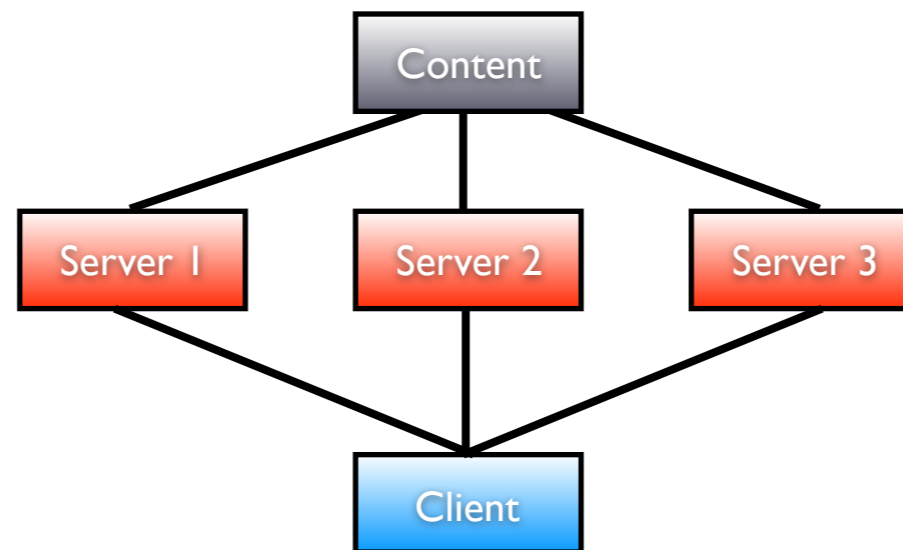
Scalable and robust transmission of data on unreliable networks from one or several sources to one or several receivers



point-to-multipoint transmission

Practical Coding Theory

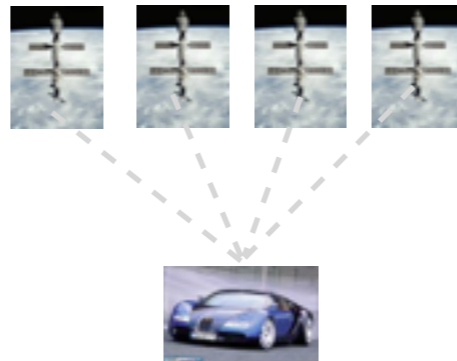
Scalable and robust transmission of data on unreliable networks from one or several sources to one or several receivers



Multipath transmission

Practical Coding Theory

Scalable and robust transmission of data on unreliable networks from one or several sources to one or several receivers



multipoint-to-point transmission

Practical Coding Theory

Scalable and robust transmission of data on unreliable networks from one or several sources to one or several receivers



Robust video

Flagship: Raptor Codes

Developed for solving problems involving loss of transmission packets.

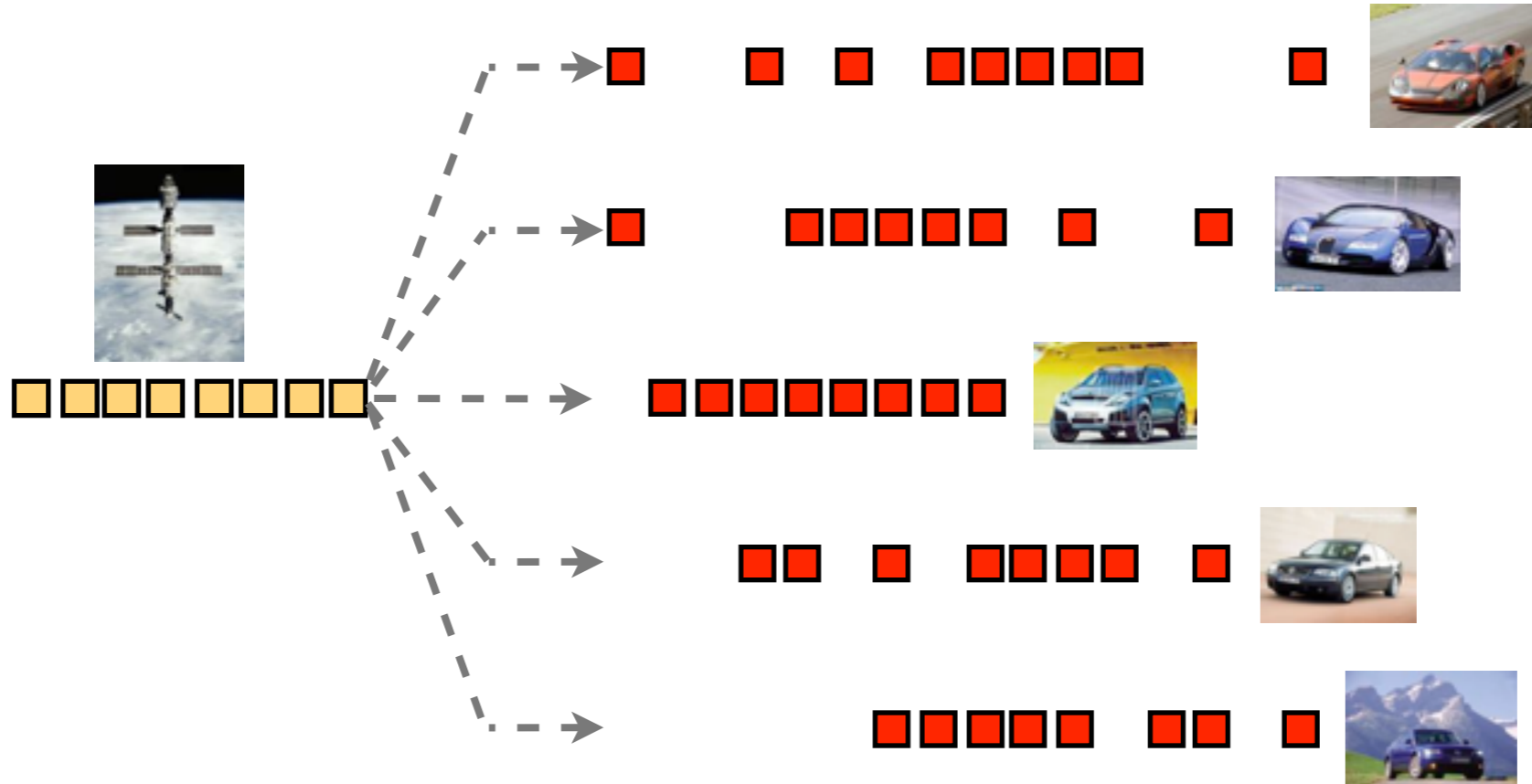
Is a mandatory standard for 3GPP MBMS data transmission.

Is a recommended standard for DVB-H data transmission.

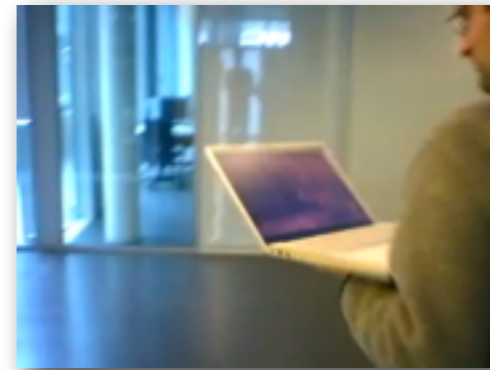
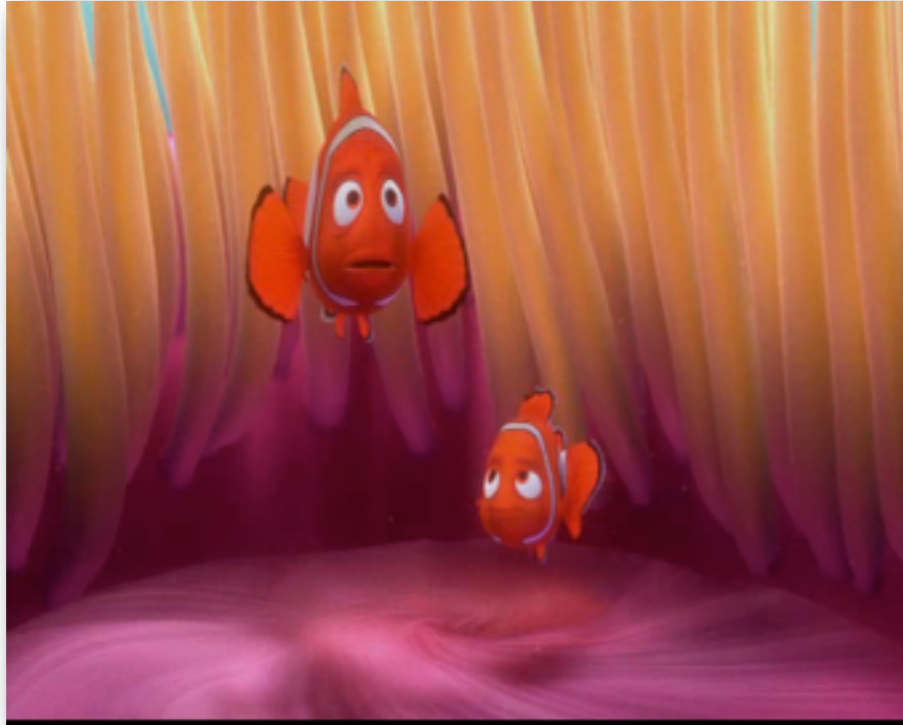
Is about to become standardized in IP-TV (and other standards bodies).

Is being used by several companies for IP-TV in the Far East.

Idea



Demonstration



Demonstration

