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Ultra-low-latency Video Distribution

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Background

Ultra-Low-Latency Interactive Streaming

Ultra-low and consistent latency is the key factor of user's experience.



*Video from RED



Background

Ultra-Low-Latency Interactive Streaming

Immersive **interaction** is the key to the all-scenario interconnection.
Ultra-low latency is the determining factor of the user's experience.



- Smartphones
- Pads
- Laptops
- Smart TVs
- Vehicle Displays
- AR headsets
- ...

*Generated using DALL-E-3

Background

Ultra-Low-Latency Interactive Streaming

Next-generation applications involve life-or-death decisions!

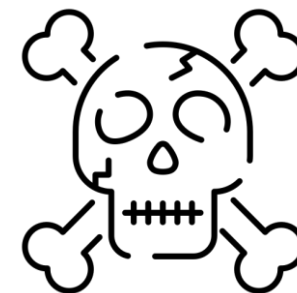


AR-assisted driving
Autonomous driving



Remote surgery

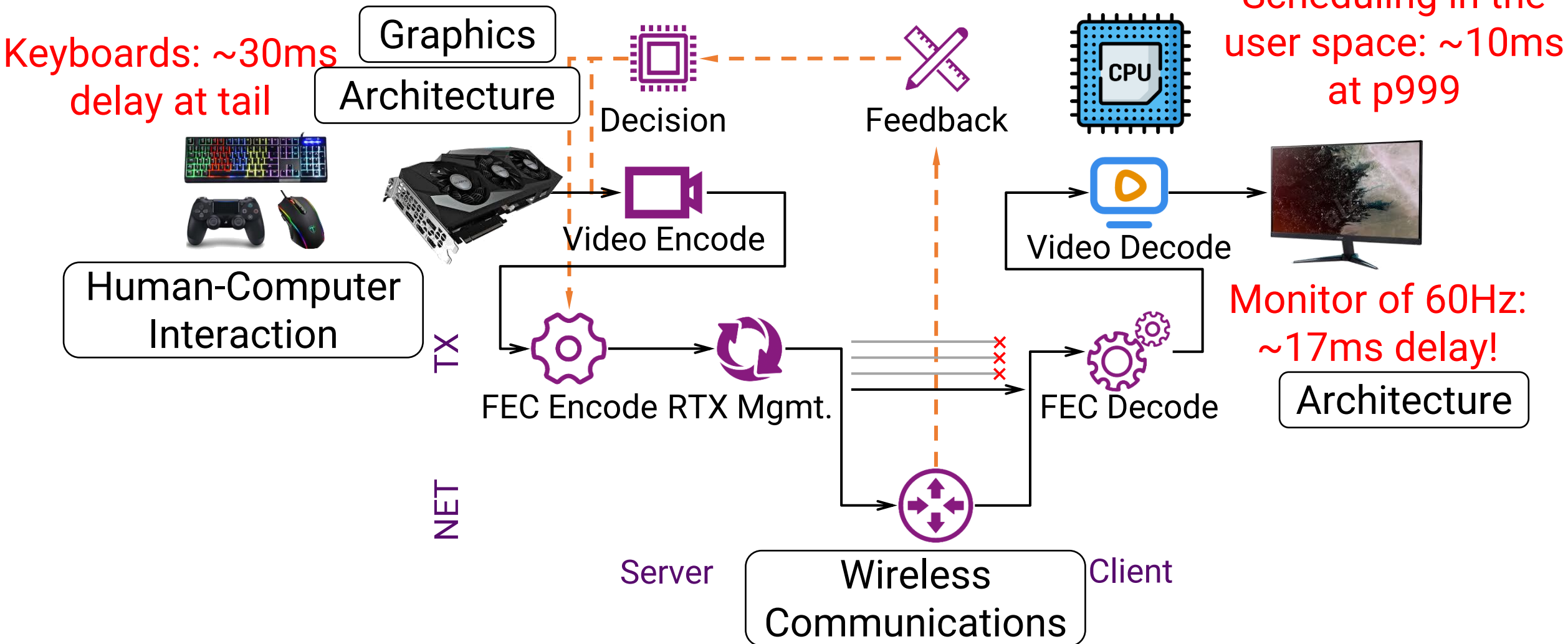
They all need continuous operations of up to **10+**
hours, where a single stall can be **fatal**!



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Ultra-Low-Latency Interactive Streaming

We need to coordinate better among a wider range.





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Ultra-Low-Latency Interactive Streaming

We need to coordinate better among a wider range.

Operating System

Graphics

Architecture

Decision

Feedback

CPU

Many efforts in each community for low latency.
We can coordinate them with the network community!

Human-Computer
Interaction

*Network latency is the most **fluctuating** component.*

Server

Wireless
Communications

Client