WEBRTC 2016 @ FCT|FCCN

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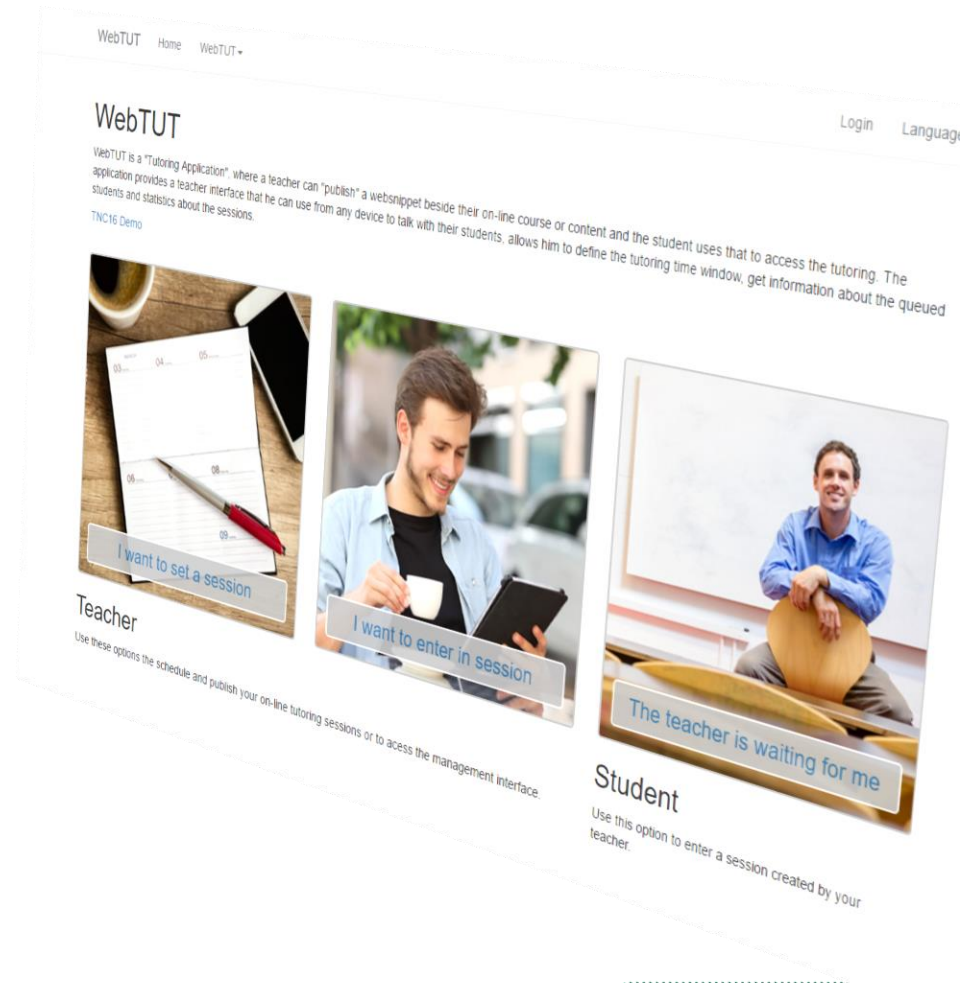Paulo Costa
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WebRTC

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WebRTC Proofs of concept

- WebTUT
- Speedmeter
- Multi-stream Video-on-demand
- Multi-screen Multi-point Videoconference

WebTUT

- Point2point vídeo tutoring
- GEANT Use Case
- eduGAIN
- Multi-language
- Features:
  – GEANT CoTURN Service
  – Callstats.io
  – Video & Chat
- Production (but not publicized)

WEBRTC Speedmeter

- Client2Server bandwidth test

- Application test, not "hard" bandwidth test

- Features:
  - Websockets & Datachannel
  - GEANT CoTURN Service

- In development

Multi-stream Video-on-demand

- Event streaming with recording and playback platform

- Features:
  - Self-service management
  - Multi-stream in-sync live, recording and playback
  - GEANT CoTURN Service
  - Server side recording
  - Integration with Lecture recording system (educast)

- Ready to test

- Server: Janus Gateway

- Any WebRTC browser can stream, even phones and tablets

- Layout auto-adjustment to stream count at a given time

- 2 x 4 months development (undergratudate IT students)

Multi-stream Video-on-demand
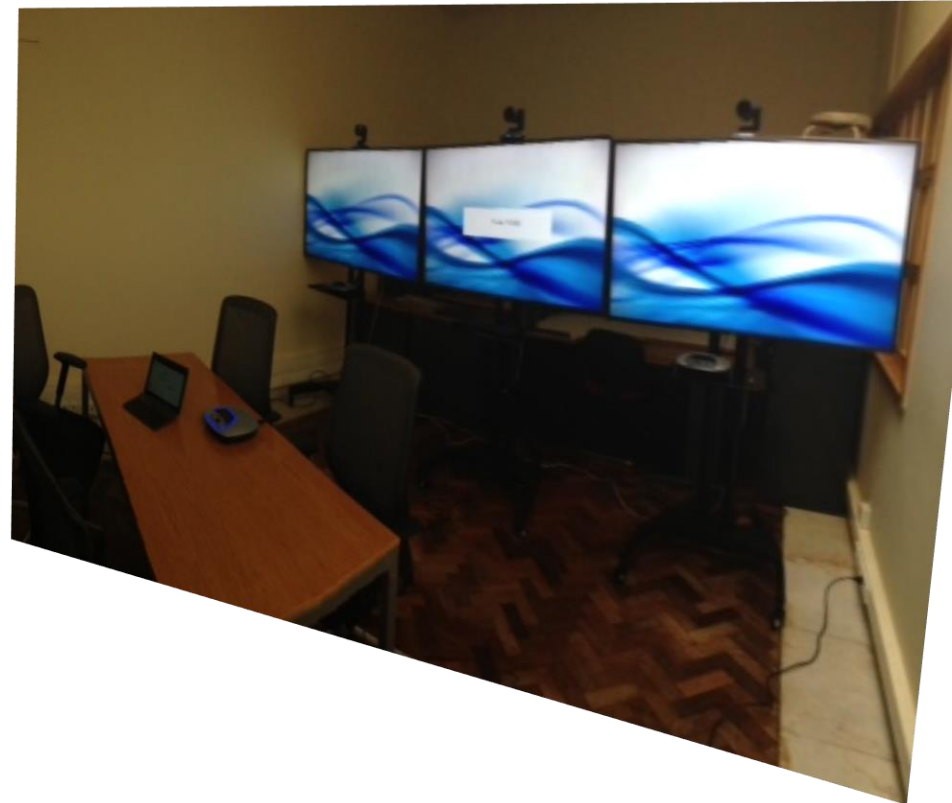
https://webrtc-hub.fccn.pt:8181/webrtc-streaming/

Multi-screen Multi-point Videoconference

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Multi-screen Multi-point Videoconference

- Telepresence like multi-point Videoconference System
- Features:
  - Multi-point with geometry awareness and layout auto adjust
  - Serverside recording (future integration)
  - Tablet/Phone WebApp for room Management
  - GEANT CoTURN Service
  - Instant join for single screen users
- Ready to test

- Server: Janus Gateway + PeerJS
- Standard (off-the-shelf) equipment
  - ~ 3000€ per module
- 2 x 4 months development (undergratudate IT students)
- … 6 months development for final tweaks

Multi-screen Multi-point Videoconference

https://webrtc-hub.fccn.pt:8091/webrtc-immersive/

Conclusion

- Tested different use cases
- Students are great!
- WEBRTC is "easy" and fast to develop new concepts

- Join us!