

Expression of Interest

Moderator: Halid Hrasnica
Eurescom GmbH / NEM Secretariat

List of Presentations (i)



- Idealist network – helping to find project partners, Tatyana Lyadnova (Idealist)
- DataScouting – Actionable media intelligence information, Stavros Vologianidis (DataScouting)
- Leveraging multimedia communications for creating a the next generation of multimedia content services, Luis Lopez (Universidad Rey Juan Carlos)
- Immersive Business Journalism / Commercialisation Partner for Horizon 2020 Projects, Dirk Heilmann (Handelsblatt Research Institute)

List of Presentations (ii)



- Phones and Tablets for Music Education in a collaborative Space, Nuria Lloret Romero (Polytechnic University of Valencia)
- Europe goes Virtual – European open mobile-streaming platform for immersive content, Thierry Baujard (Media deals)
- Multilingual Writing Robots applied to media development, Claude de Loupy (Syllabs)
- Team Potioc: popular interaction, spatial augmented reality and brain-computer interaction, Fabien Lotte (Inria)
- 8K technology – next generation of UHD visualisation, Maciej Strozyk (PSNC)



IDEAL-IST

www.ideal-ist.eu

Your Worldwide ICT Support Network

Ideal-ist

Tatyana Lyadnova / Géraud Guilloud

Brussels, March 15th, 2016



This project has received funding from
the European Union's Horizon 2020
research and innovation programme
under grant agreement No 645216

Smart, good-looking people with massive experience to help y

Well, almost everyone is good-looking.

Albania Argentina Armenia Australia Austria Azerbaijan Belarus Belgium -Brussels Belgium -
Federal Belgium -Flanders Belgium -Wallonia Bolivia Bosnia and Herzegovina Bulgaria Canada
Chile Costa Rica Croatia Cyprus Czech Republic Denmark Dominican Republic Egypt Estonia
Faroe Islands Finland France Georgia Germany Greece Greenland Guatemala Hungary
Iceland India Indonesia Ireland Israel Italy Japan Jordan Latvia Lithuania Luxembourg
Macedonia Malta Mexico Moldova Montenegro Morocco Netherlands New Zealand Norway
Philippines Poland Portugal Romania Russia Serbia Singapore Slovakia Slovenia Spain
Sweden Switzerland Taiwan Tunisia Turkey Uganda Ukraine United Kingdom Uruguay
Uzbekistan

from 72 countries



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Fantastic services!



Partner
match/search



Pre-proposal
and proposal
check



Brokerage





The screenshot shows the IDEAL-IST website with a blue header and a navigation menu. The main content area features a large image of people in business attire. Below the image are several call-to-action buttons: 'View Partner Searches', 'Launch a New Partner Search', 'Toolbox', and 'Find your Representative'. A large, stylized text overlay reads 'Helping European Researchers... it's our job!!!'. The bottom of the page displays three columns of content: 'Recent calls' with a list of project deadlines, 'Recent Projects' with a list of project titles and descriptions, and 'ICT Events' with a list of upcoming conferences and symposiums.

Helping European Researchers... it's our job!!!



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DATASCOUTING

actionable information

DataScouting

Stavros Vologiannidis

Founder, Technology Manager

<http://www.datascouting.com>



Who we are



\ ICT Research and Development SME

\ Fields

- Media Intelligence Software Solutions
- Cultural Heritage

\ Research & Development on

- Multimedia Knowledge Discovery
- Text, audio, video & speech analytics
- Cloud applications, distributed computing

\ Investing on

- People / expertise
- Infrastructure
- Procedures – Agile methodologies, TÜV Rheinland ISO 9001:2008
- Building relations – Members of FIBEP (World Media Intelligence Association), AMEC (International Association for the Measurement and Evaluation of Communication)

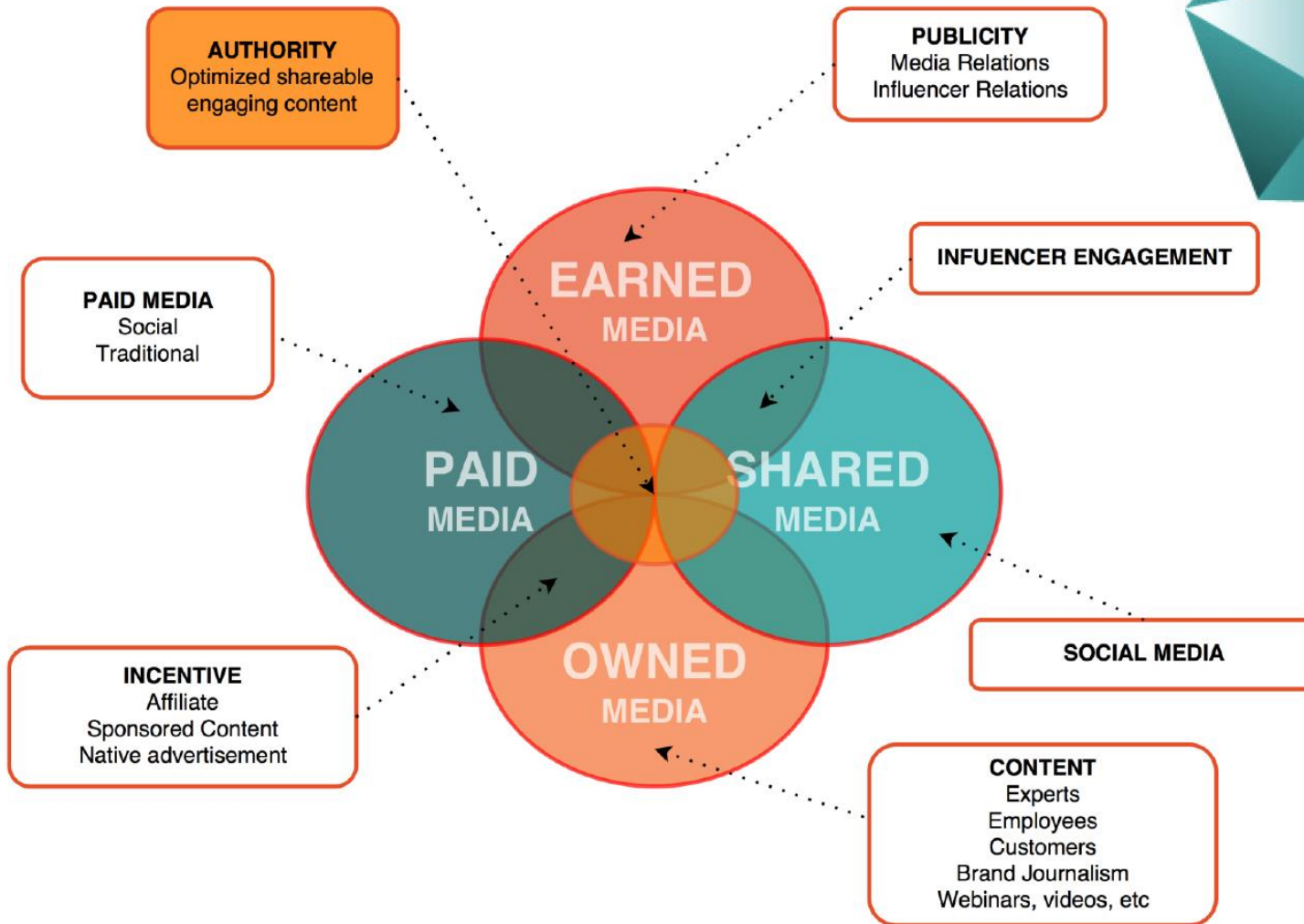


Public Relations and Communications Management



- \ The practice of managing the spread of information between an organization and the public
 - \ Establish and maintain relationships with an organization's target audience, the media and other opinion leaders
 - Research and Evaluation (Tactics/strategy)
 - Content creation and relationship management (PESO Model)
 - **Media Monitoring** (Collection of data from traditional and social media)
 - **Measurement and Evaluation Insights** (Data driven metrics tied to business goals)
 - REPEAT
-

PESO Model in Content Creation and Relationship Management



Public Relations and Communications Management



- Research and Evaluation
 - Data Driven, Actionable Information
 - Content creation and relationship management
 - New landscape of media
 - New audience (influencers, advocates) and communities emerge
 - **Media Intelligence**
 - Media Monitoring (real time, cross media, multilingual)
 - Predictive Analytics (crisis, campaign, consumer behavior,...)
 - Media Intelligence vs. Business Intelligence
 - **Measurement and Evaluation Insights**
 - Real time analytics according to business goals
-

DATASCOUTING

actionable information

Dr Stavros Vologiannidis

DataScouting

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Linkedin: <https://gr.linkedin.com/in/vologiannidis>

Twitter: @svologia

Follow DataScouting on:



Transport++:

Leveraging multimedia communications for creating a the next generation of multimedia content services.



KURENTO



Luis López

lulop@kurento.org

www.kurento.org





Who we are



URJC (University)

- Leading research group in real-time multimedia technologies
- NUBOMEDIA
 - Coordinators
 - <http://www.nubomedia.eu>
- FIWARE
 - Stream Oriented GE creators
 - <http://www.fiware.org>
 - <http://www.kurento.org>

NAEVATEC (SME)

- Solution provider in the area of WebRTC
- NUBOMEDIA
 - Media server technology
 - <http://www.nubomedia.eu>
- FIWARE
 - Solution provider
 - <http://www.fiware.org>
 - <http://www.kurento.org>

About Kurento

Open Source Software project

<http://www.kurento.org/documentation>

Kurento FOSS community has been funded by the European Commission with 2.5M€



WebRTC worldwide reference

A screenshot of a Google search for 'webrtc media server'. The search results show a top-ranked result for 'WEBRTC Contact Center - communigate.com'. A black text box is overlaid on the search results, containing the text: 'Top ranked WebRTC Media Server in Google'. Below the search results, there are links for 'Kurento' and 'Documentation - What's Kurento - Community - Contact'.

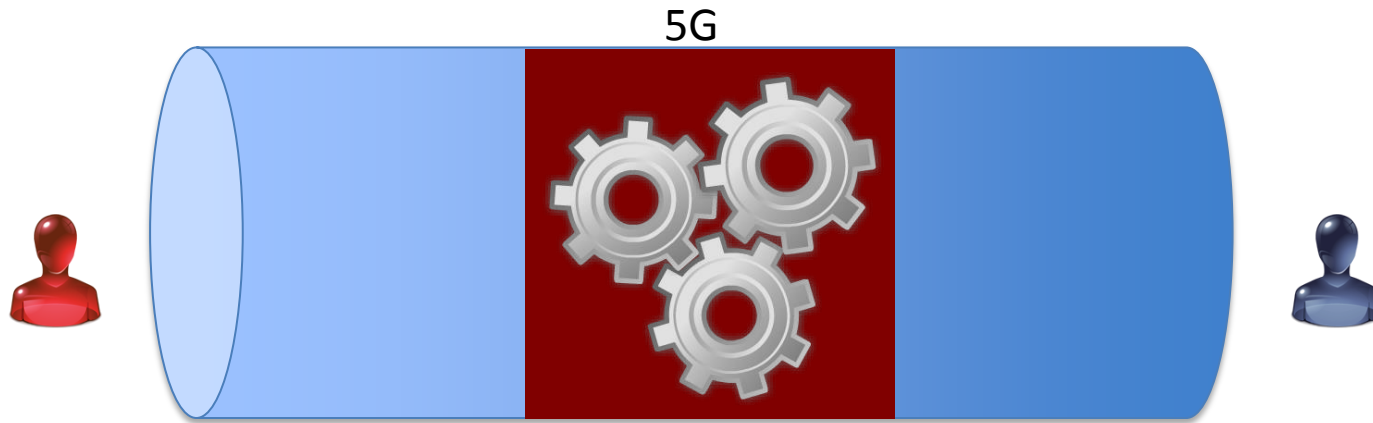
International awards



More than 300 companies using it



TRANSPORT+: more than transport



Use-cases

Augmented reality



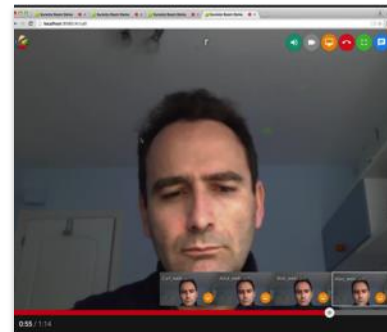
<https://www.youtube.com/watch?v=JlBq4PzeRKQ>

Mixing and blending



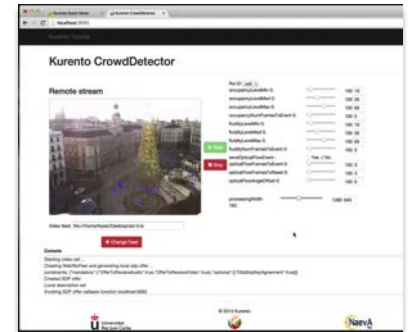
<https://www.youtube.com/watch?v=WrmzblZGDo>

Group communications



<https://www.youtube.com/watch?v=hkT8fLRodwo>

Smart-cities



<https://www.youtube.com/channel/UCFtGHwYqahVizMgGNtEmKug>

TRANSPORT++ media technologies



WebRTC



KURENTO



Seeking for partners

- Users
 - Content generators
 - Content distributors
 - Operators
- Technology providers
 - 3D media
 - OpenGL/WebGL
 - Audio/Video Content Analysis

Seeking for projects

- WebRTC
- Real-time media
- Advanced media processing
- Cloud infrastructures for communications

Thank you

- Luis Lopez
 - lulop@kurento.org
 - www.kurento.org
 - www.nubomedia.eu
 - www.fiware.org





Handelsblatt Research Institute as a partner for EU projects.

Presentation for the
21st NEM General Assembly
March 2016, Brussels

Dirk Heilmann
Managing Partner

Who we are

- An independent research institute under the auspices of the Handelsblatt Publishing Group, Germany's leading publisher of business media
- A team of 20 scientists from various disciplines, most of them economists
- Scientific research for companies, trade associations, NGOs and governments
- Desk research for the editorial staff and for external customers
- Corporate history, factbooks and other publications
- Unique combination of economic expertise and journalistic flair



Commercialization Partner

- The HRI is part of the SSIX consortium funded under Horizon 2020 (Social Sentiment Analysis Financial IndeXes ICT-15-2014) (<http://ssix-project.eu/>)
- As commercialization partner, the HRI is responsible for filling the gap between the technical development of the product and a successful market introduction. (Analyzing the market and competitors' business models, creating a go-to-market strategy and a business plan, contacting potential end-users)
- Applied for further grants (Climate Service Market Research (SC5-03-2016) and FTIs)
- HRI is a potential commercialization and dissemination partner for all kinds of Horizon 2020 projects, offering research, access to Europe's biggest market and a great network in the media industry



Project idea: Economic education through immersive storytelling

- Putting together a consortium to apply for a project under the call ICT-19-2017
- Improving the understanding of economic issues, especially among younger people by creating immersive stories using AR or VR
- Partners: WirtschaftsWoche, Germany's leading economic magazine, and Hochschule für Medien in Düsseldorf
- **Idea 1:** Build a virtual world called "Mission Economy" as an education platform for students. Possible content: Explaining important economic ideas, exploring economic data by walking through infographics, introducing entrepreneurial success stories, exploring global production chains
- Looking for international partners in media design, game development, technology (hardware and software)



Project ideas: Economic education through immersive storytelling

- **Idea 2:** The job application coach
- Creating a virtual assessment center where job-seekers can learn how to present themselves, how to write an application and how to find potential employers.
- Looking for partners: International consultancies, employment agencies, media design, film production, game developers, technology (hardware and software) providers
- **Idea 3:** The start-up simulator
- Creating a simulator to help people start a company: how to pitch ideas, how to find capital and support, which regulations to follow, how to find business partners and employees, how to deal with management practice and learn from success stories.
- Looking for partners: Start-up incubators, academia, private equity funds, media design, game development, technology (hardware and software) providers





THANK YOU FOR YOUR TIME

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Handelsblatt
RESEARCH INSTITUTE



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



Smartphones, tablets y kinect for music education



sound
cool

Prof. Nuria Lloret

Universitat Politècnica de València

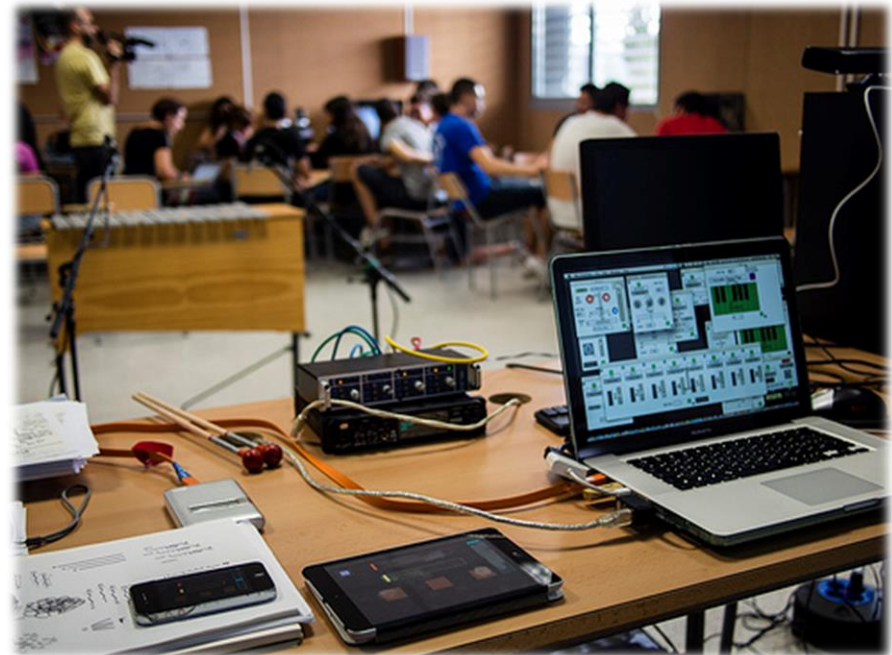


UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

¿Who we are?



- ⌘ This project is developed by Universitat Politècnica de València and financed in a first step by the Spanish Education Government, with collaboration with Computer Music group from Carnegie Mellon University (EEUU)



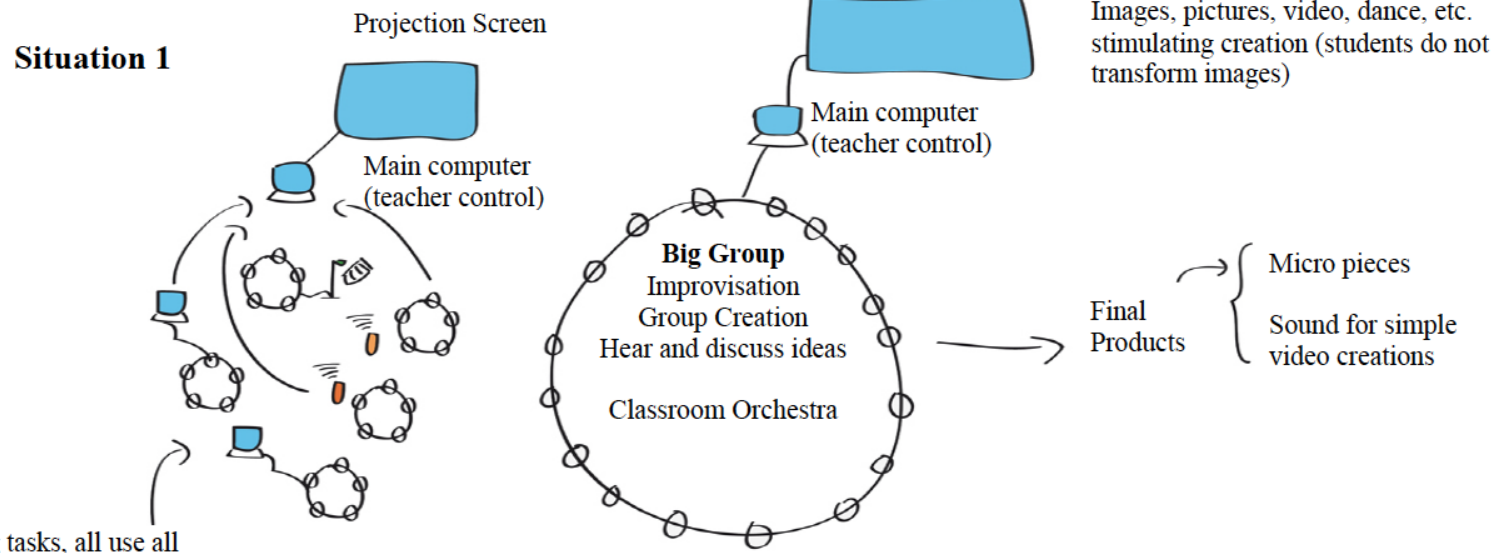


Scenario 1

Classroom laboratory

25/30 students

1st cycle ESO 13-15 years old



Small groups, Rotating tasks, all use all

1. Basic manipulation: record/play module, cut/paste (Audacity)
2. Micros: record acoustic instruments, basic manipulation (level 1) offline and real time, simple effects, sound library creation from class or external sounds
3. Mobile devices connectivity
4. Combination of electronic and acoustic instruments

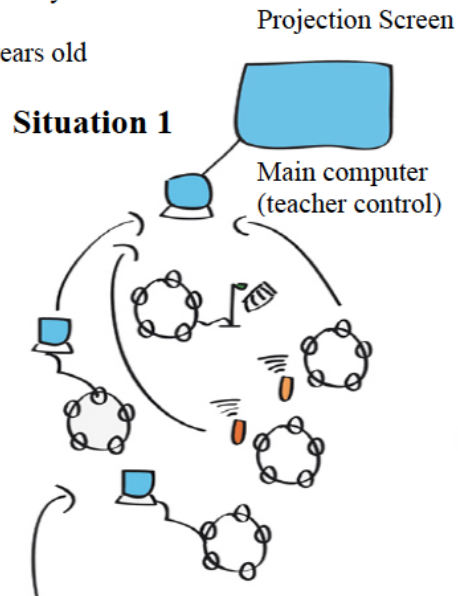


Scenario 2

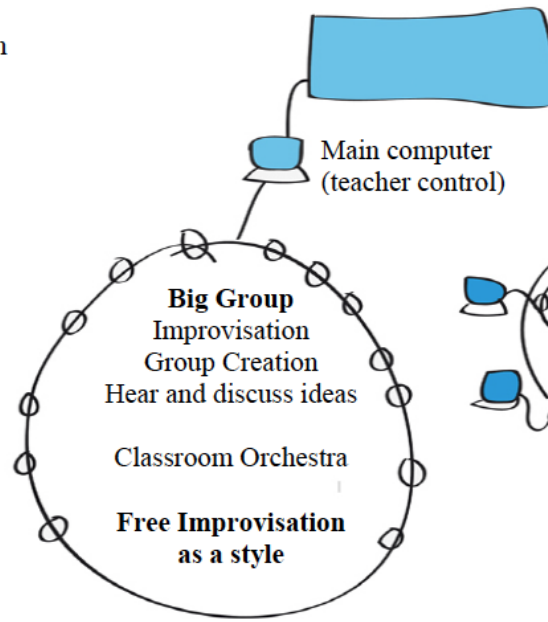
Classroom sound laboratory

25/30 students

2nd cycle ESO 15-18 years old

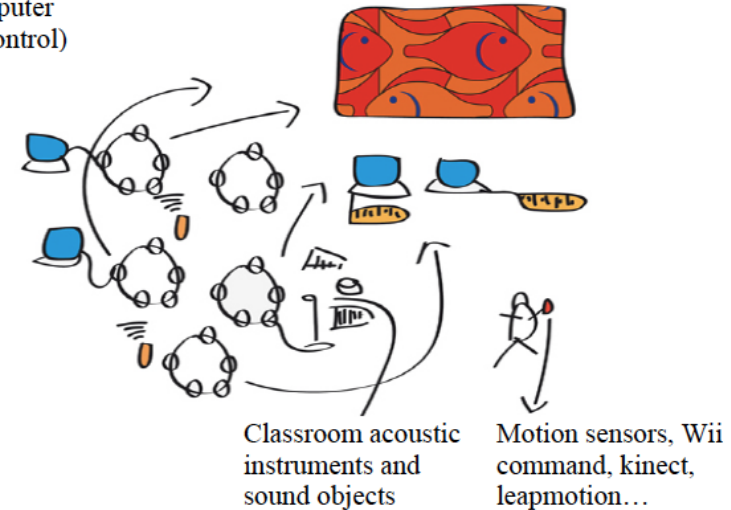


Situation 2



Situation 3

Collective concert
Macro pieces



Small groups, Rotating tasks, all use all

1. Task more focused on sound transformation
2. Effects and filters
3. Use of libraries and transformation of sounds
4. Use of visual material (video loops), audiovisual creation
5. Macro-structures
6. Different styles: Ambient-electro acoustic-electronica...
7. Use of Sensors, greater motion and gestures

Work focused on collective piece creation and live performance, real concert situation

Multidisciplinary teams work on different materials to make a whole performance (audiovisual, lights, sensors, different devices including mobile phones)

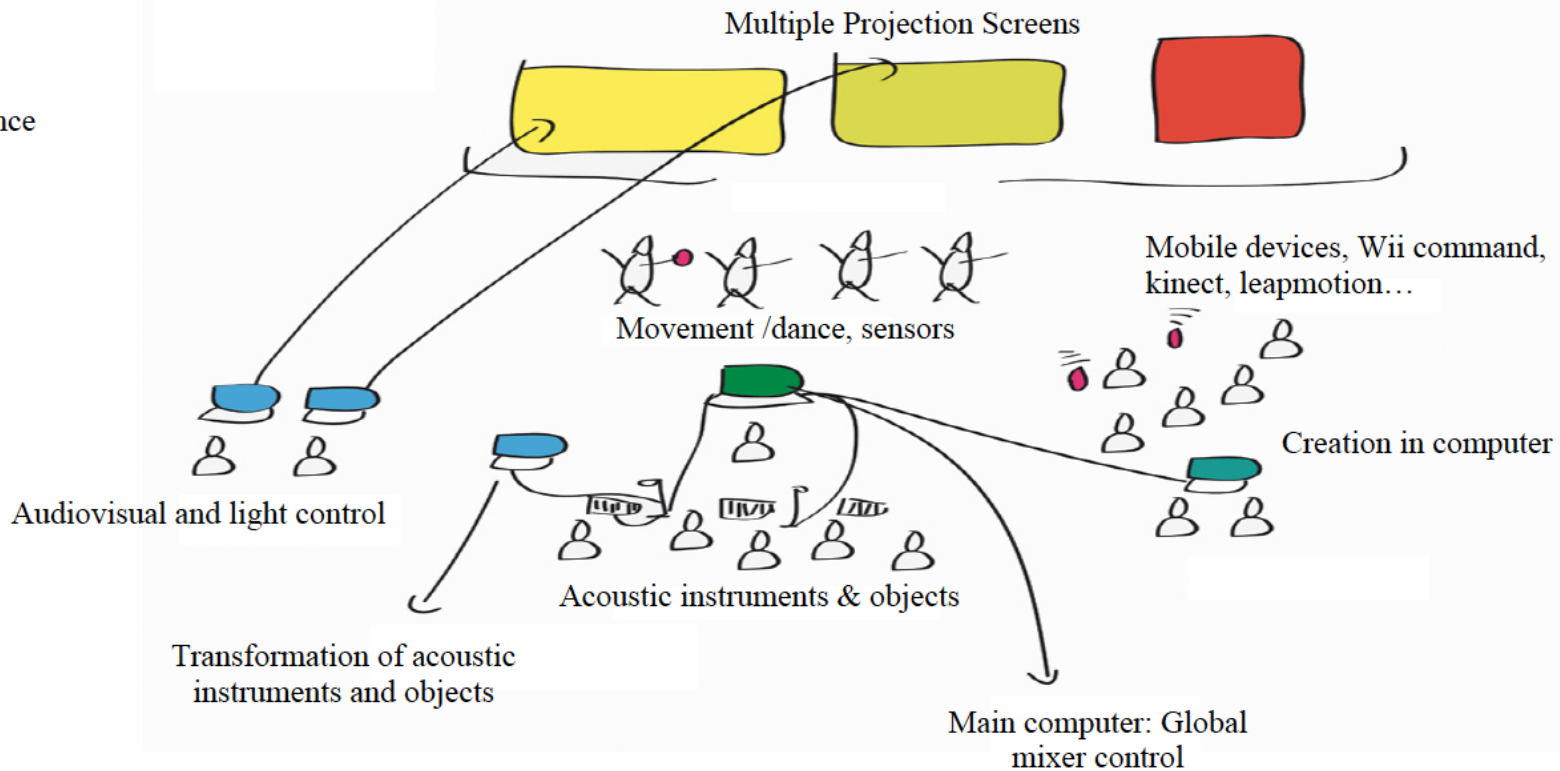


Collaborative 2.0 Scenario



Scenario 3:

Live concert/Performance
25/30 students
Different Levels

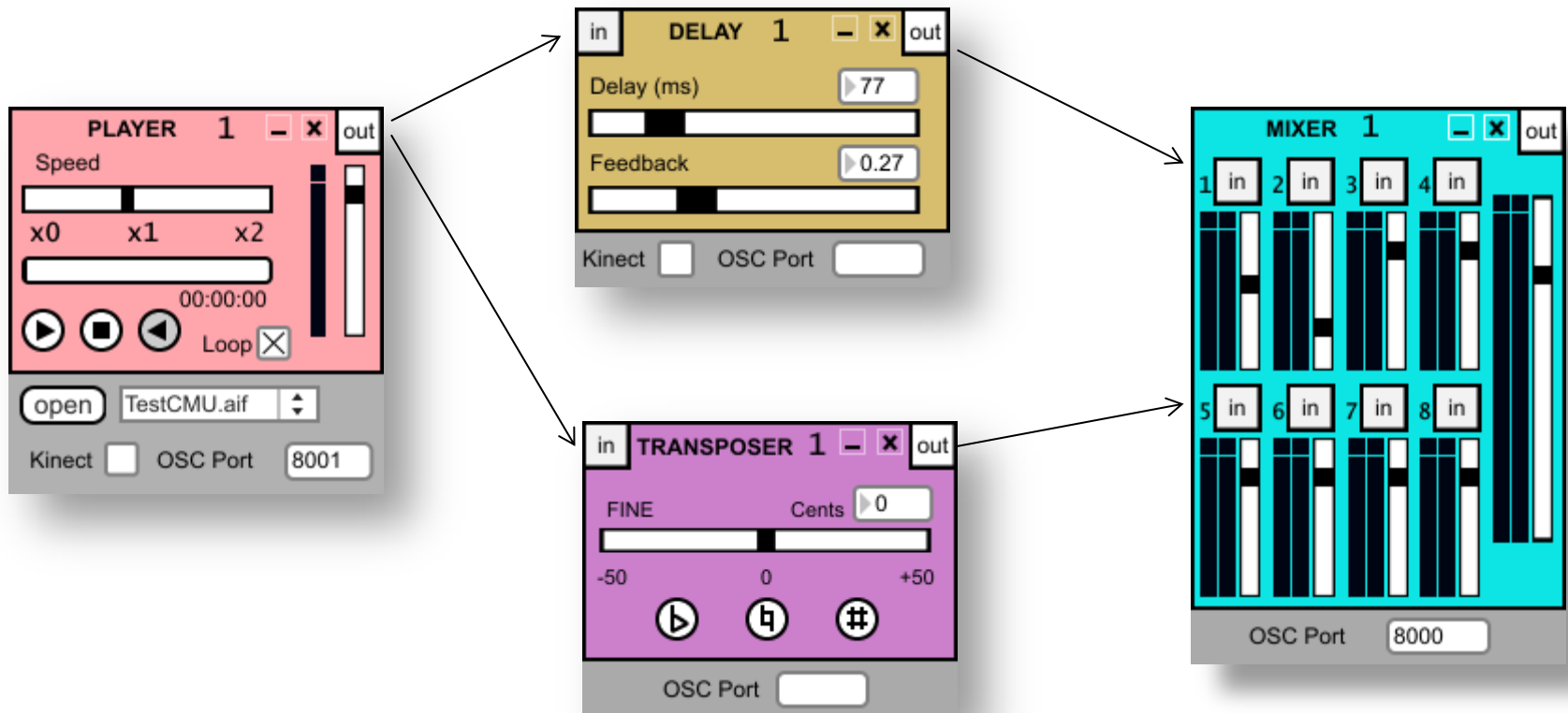




MAX: MODULES



⌘ INTERCONNECTED MODULS

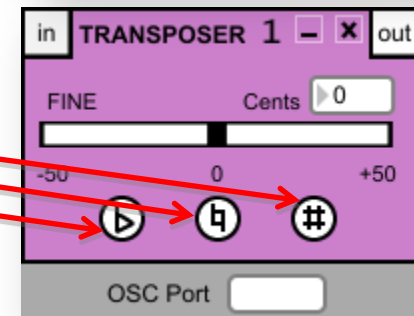
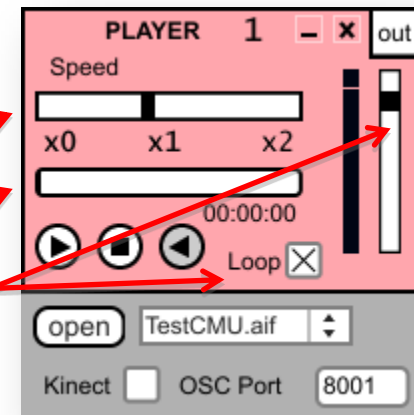
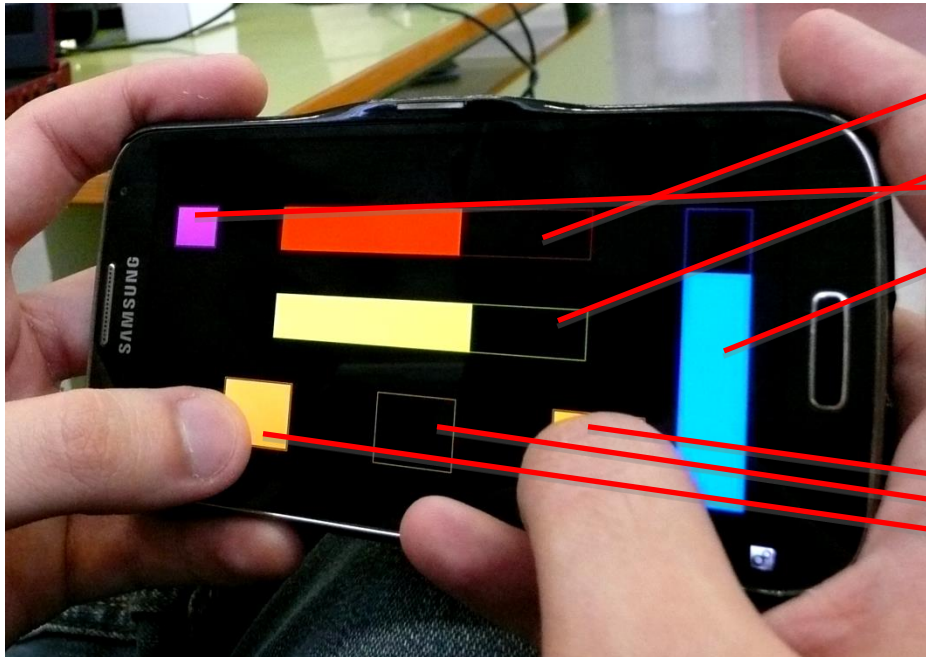




INTERFACES: MOBILE, TABLETS Y KINECT



Android/iOS





UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



Contact:

**Universitat Politècnica de
València**

nlloret@upvnet.upv.es

Europe goes virtual



- H2020 FTI pilot
- European open Mobile-streaming platform for immersive content for 2D and 3D filmed and animated virtual reality content to be displayed on various VR devices

Trials:

- VR experience with magazines
- Interactive VR as Second Screen experience
- Live VR Sports experience

Partners:

- Fraunhofer Heinrich Hertz Institute, Germany
- The Fridge, Belgium
- Exozet, Germany
- Media Deals, Germany

Search for:

Content production/owner



Creative Semantics



NEM General Assembly

Claude de Loupy

15/03/2016



Syllabs

- 9 years :
 - 2006 – 2011 : Consulting & R&D
 - 2012 – 2015 : technological solutions
 - 2014 – ... : startup mode: solutions for media
- 10 persons
 - 3 experts in semantics (for the EC)

data2content

Robot writer

syLLabs
SEMANTICS

Web Mining
Text Mining

syLLabs
MEDIA

Curation
Press Review



Syllabs' Robot writers

- Automatic production of articles :
 - Quality : 6 media outlets publish without proof reading
 - Volume : 1.3 M texts published in 24 h
 - Human setup : computational linguists
 - Respect editorial policy
 - Multilingual
 - Easy to use : pull (SaaS) / push (ftp, ...)
 - Robust : 30+ clients
 - Uniq : SEO skills

LesEchos

Le Monde



L'EXPRESS

Le Parisien

LE MONITEUR



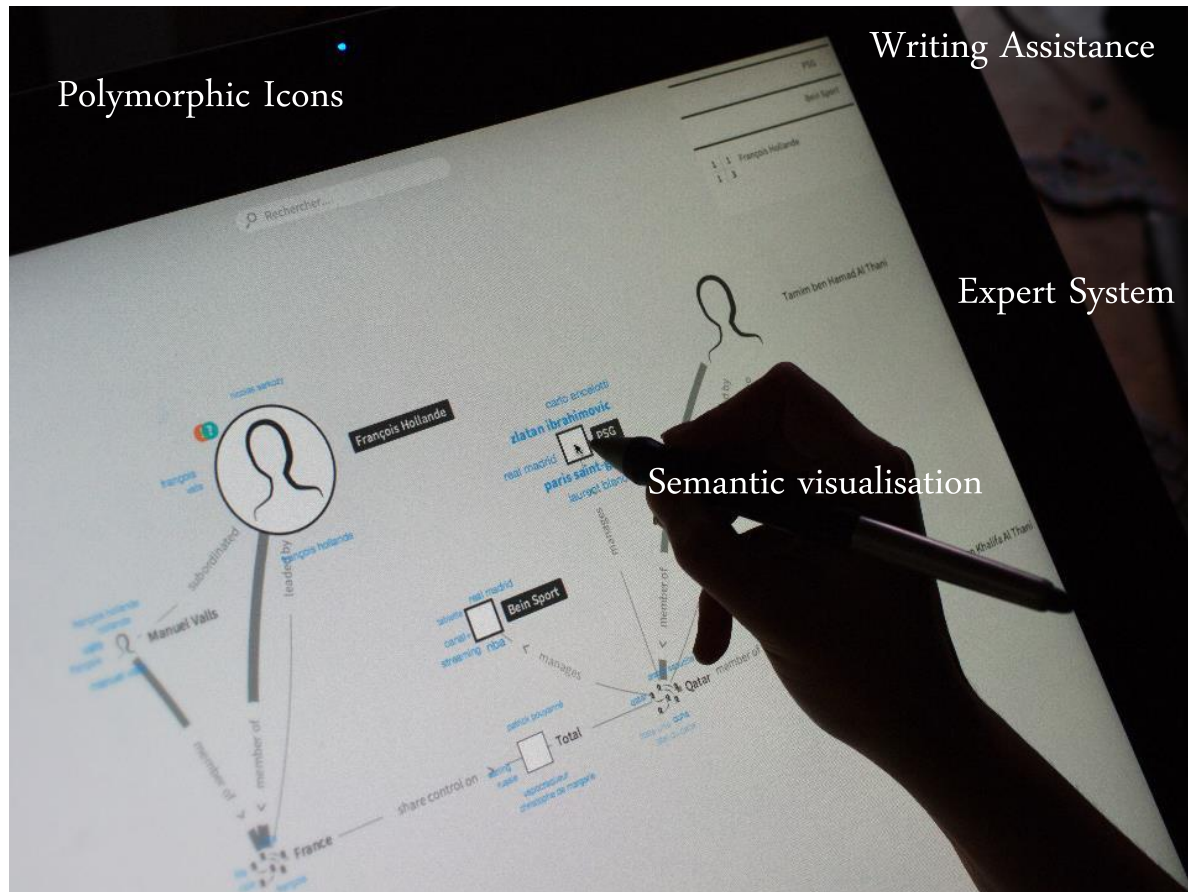
H2020 projects with Robot Writers

- Simplify the programming of the engine to let journalists configure their own contents.
- Develop a platform to boost the collaboration between journalists and robots (data, texts, dataviz, etc.)
- Develop a massively multilingual engine



Tools for the investigation

- Knowledge base
- Graphic representation of knowledge with up to date information & alerts





Project for the investigation

- Huge knowledge base with verified facts
 - Semi-automatic processes to detect potential changes & new facts
- Visual, interactive and « intelligent » investigation solution



Creative Semantics



Claude de Loupy

Président & Co-fondateur

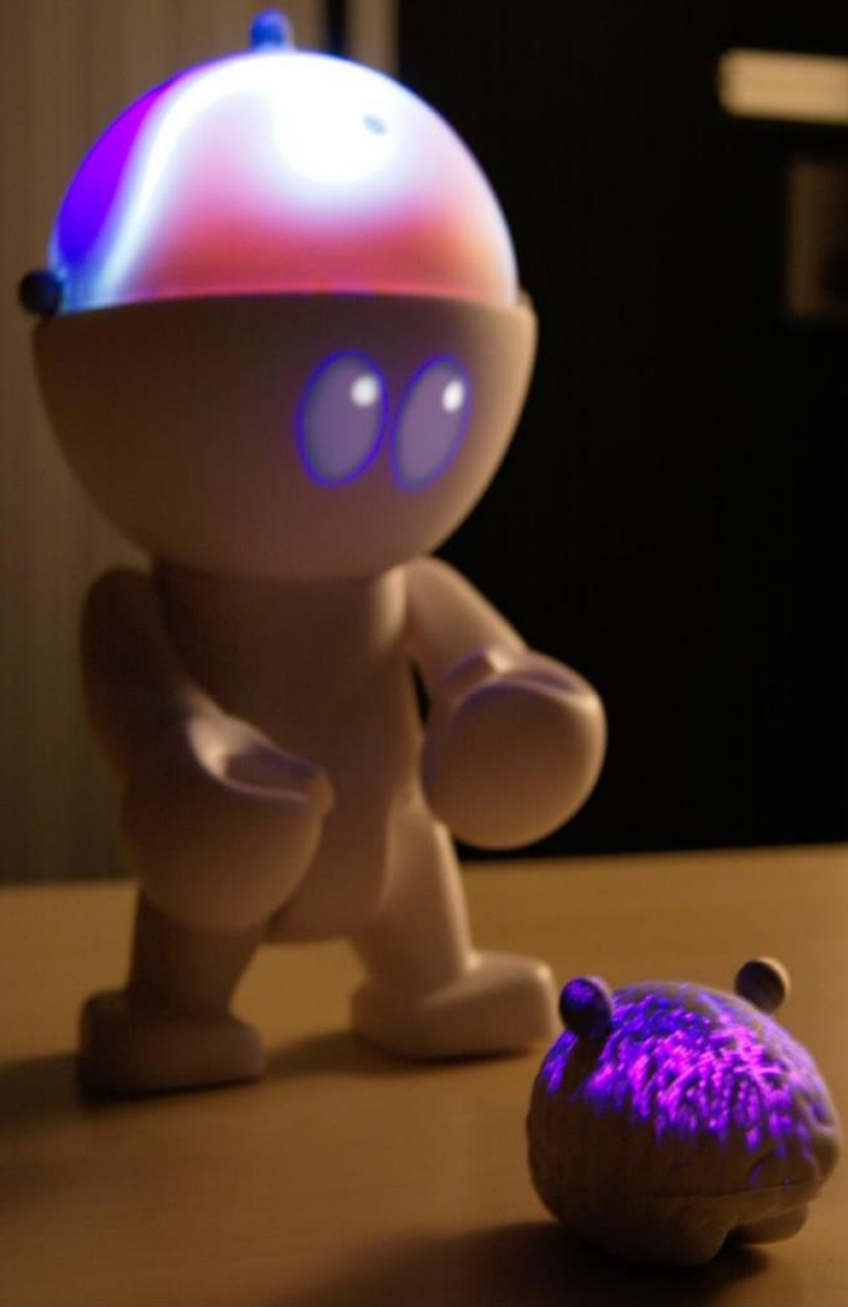
CEO & Co-founder

✉ loupy@syllabs.com

☎ + 33 (0)6 08 99 84 90

🐦 @cdeloupy / @syllabs

📄 syllabs



potioc
popular interaction

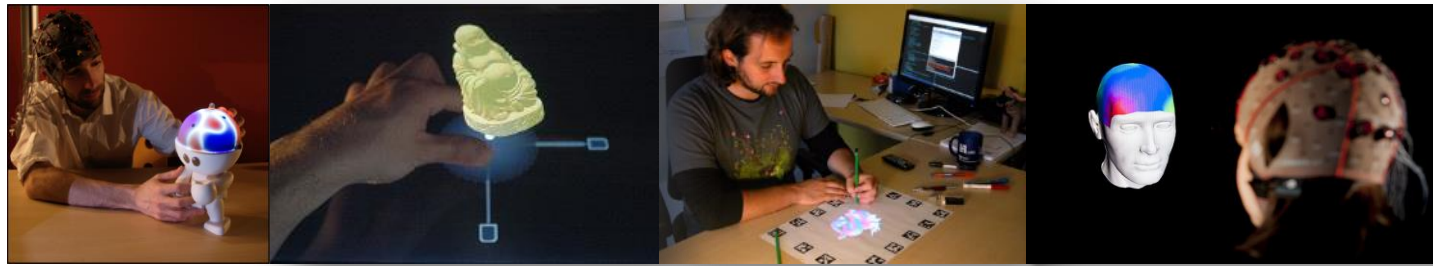
Fabien LOTTE
Inria Bordeaux Sud-Ouest
France



université
de BORDEAUX



Inria



Potioc

Popular interaction

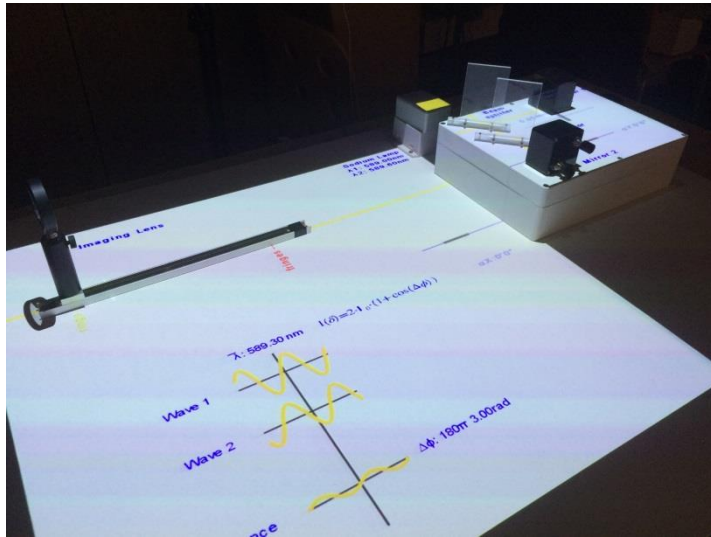
« Making Human-Computer Interaction accessible to everyone »

Keywords: Tangible interaction, Spatial Augmented reality, Brain-Computer Interaction, Virtual Reality



~18 people (4 permanent research scientists)

Spatial Augmented Reality



Education

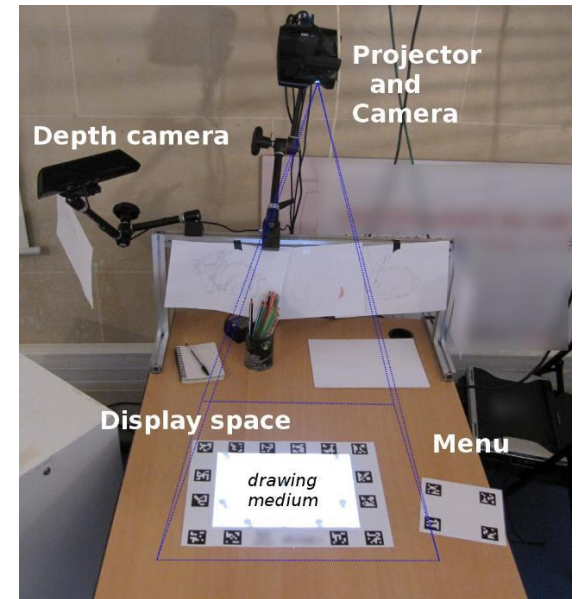
[Furio et al, 2015]

Art

[Gervais et al, 2016]

Entertainment

[Laviole et al, 2012]



Brain-Computer Interface (BCI) & Physiological computing

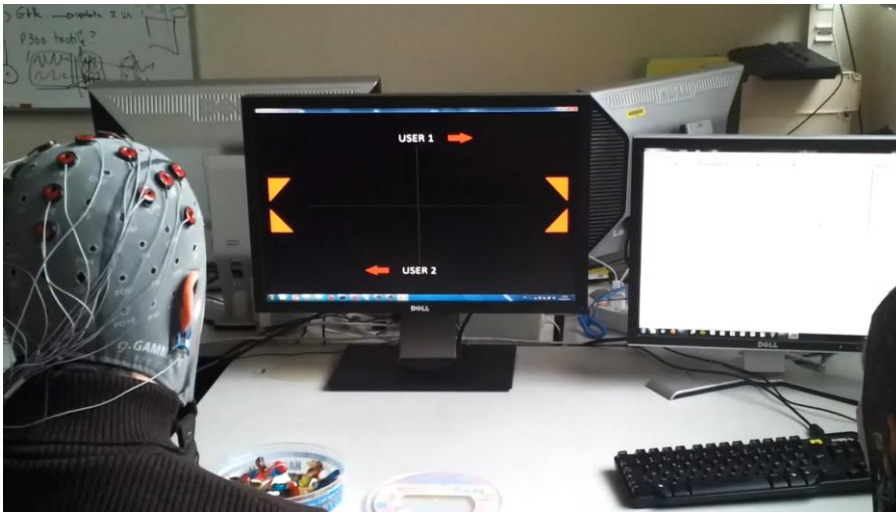
BCI: System translating measures of brain activity into commands or messages for an interactive application

BCI for communication & control:

BCI-based gaming & Virtual Reality
Accessible interaction and devices
[Lotte et al, 2013, 2015]

NeuroErgonomics:

Monitoring brain signals to assess the ergonomics quality of User Interfaces
[Frey et al, 2014, 2016]



Free and Open-source BCI design software: OpenViBE (openvibe.inria.fr)

Spatial AR + Physiology + BCI + Tangibles



Tobe
Tangible Out of Body
Experience

Gervais, Frey, Gay, Lotte, Hachet, *“TOBE: Tangible Out-of-Body Experience”*, TEI, 2016

Thank you for your attention!



potioc
popular interaction

Any question?

Fabien Lotte

web: <http://sites.google.com/site/fabienlotte/>

Potioc team web: <http://team.inria.fr/potioc>

e-mail: fabien.lotte@inria.fr



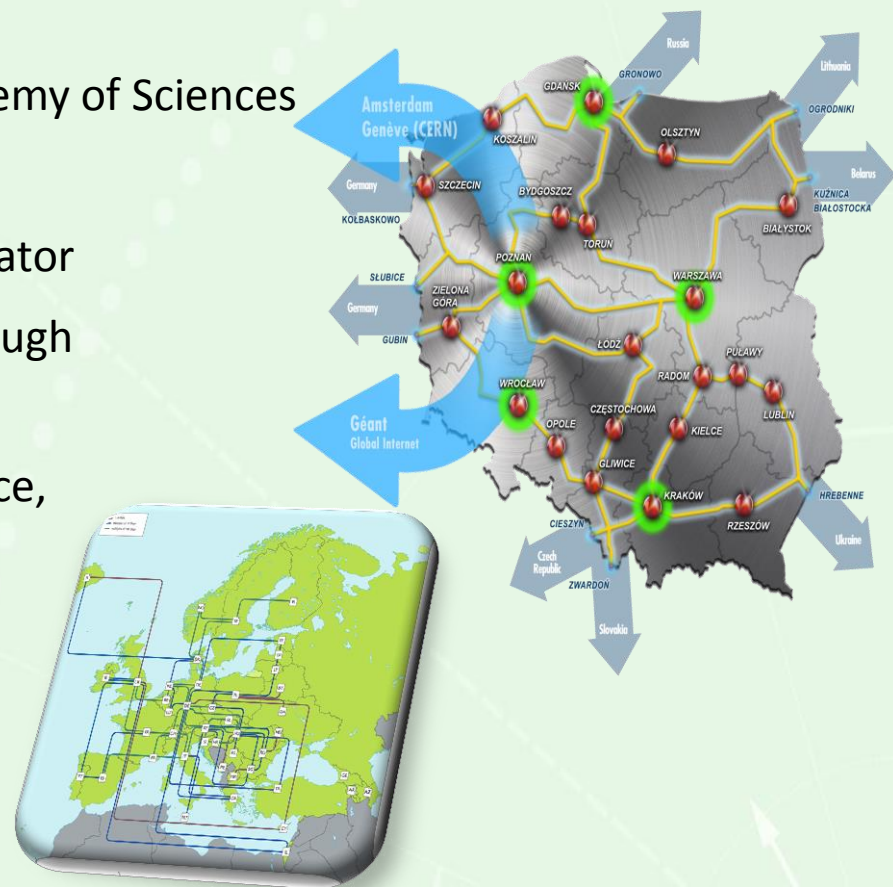
8K technology

– next generation of UHD visualisation

Maciej Glowiak, PSNC, mac@man.poznan.pl
Maciej Strozyk, PSNC, mackostr@man.poznan.pl

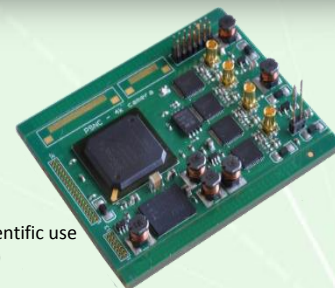
PSNC - Poznan Supercomputing and Networking Center

- Polish Research Institute, part of Polish Academy of Sciences
- **Center for Research & Development**
- 100G/400G national backbone network operator
- Connectivity to Europe & U.S. Networks through GEANT network or GLIF infrastructure
- Storage, clouds, computing clusters for Science,
- **New Generation Networks, SDN**
- **New media technologies (4K/8K/UHD/3D)**
- **Electronics development and prototyping**



4K Node in Poznan

- **Lab established in 2008**
- **One of first UHD/4K 3D installation in the Europe**
 - Active partner of CINEGRID, CINEGRID Amsterdam, HPDMNET, NEM, VISIONAIR
- **Own software and hardware development**
 - UHD and Stereoscopy
 - Uncompressed and compressed streaming (JPEG2000)
 - Streaming system based on Intopix JPEG2000 Pristine4
 - Uncompressed streaming using CIENA DWDM devices
 - Own software development in European and national projects
 - Electronic design: 4K Mini-camera for scientific use



Mini 4K camera for scientific use
(development in PSNC)

8K laboratory for H2020 projects

8K visualisation infrastructure

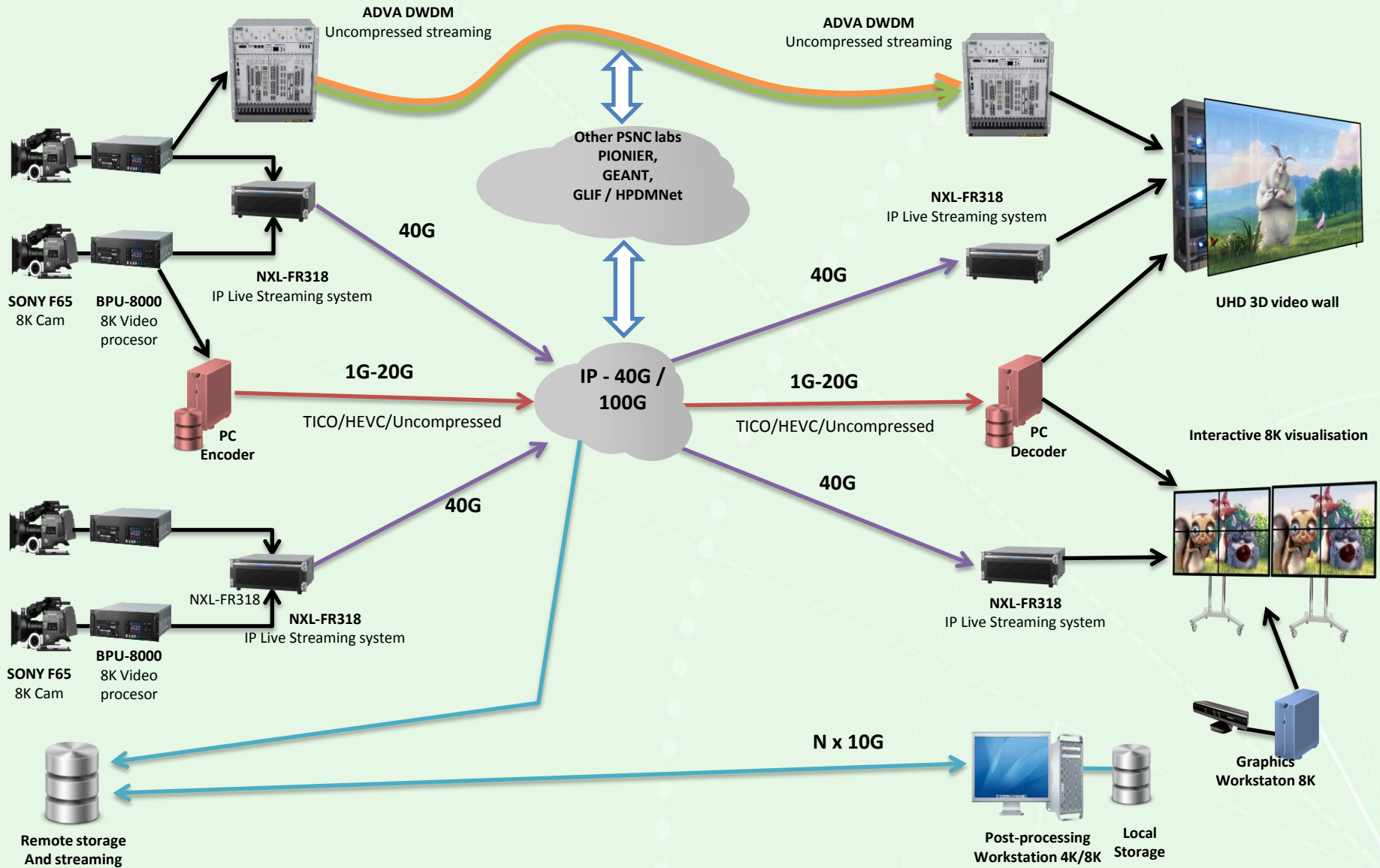
- 6-meter-wide, 16:9, rear projection video wall
- Full 8K resolution (8192 x 4320)
- Support for 8K 120Hz and 8K 3D 60Hz
- Video interfaces: 3G SDI, DP, HDMI
- Projection system - 8K 3D 60p
 - 12x WQXGA BARCO F50 projector
 - Video processing and blending (4x BARCO E2 + 12x M)



8K capture and streaming infrastructure

- Capture, recording, post-processing and streaming 8K 3D 60p
 - 4x SONY F65 camera with BPU8000 processor + 3D rig
 - Auxiliary 4K cameras: BlackMagic and Adimec (180 fps)
 - Post-production station (PC with Adobe Premium)
 - Dedicated video archiving system (up to 47 PB)
- Live Bi-directional transmission of 8K 3D in 40G/100G network
 - Streaming system - SONY IP Live
 - Multiple 3G-SDI uncompressed streaming DWDM (ADVA)
 - 100G/40G network devices





Appliances and research scenarios

- **Live 8K video transmissions over IP**
 - Medical education
 - Transmissions from surgeries for doctors and students
 - Sport and cultural events
- **8K videoconferencing**
 - 4K and 8K (WebRTC)
- **4K and 8K multi-camera systems**
- **Development of codecs and streaming systems**
 - R&D collaboration with SONY, SpinDigital (HEVC), TICO Alliance, etc.
- **Support for scientists** and researchers in 8K applications (visualisation, slow-motion acquisition)
- **8K reference laboratory** – signal testing and verification of devices according standards
- **New network protocols** and gateways (e.g. SMPTE 2022/6)
- **Electronic devices development** – own **4K camera** for robotics / machine vision / monitoring areas (FPGA lab for designing, prototyping, production and testing electronic boards)

Collaboration

- Common European project (Horizon 2020)
 - **Networks&media**
 - Multimedia transmission over IP
 - Wireless networks (calls related to „5G”)
 - IP Broadcast workflow
 - SDI-IP gateways
 - SDN
 - **ICT and FET**
 - **ICT-21-2016** - "Support technology transfer to the creative industries"
 - **ICT-19-2017** – „Media and content convergence”
 - Content production and processing
 - Codecs
 - Dedicated cameras for machine vision algorithms
- PSNC may work as a subcontractor in bilateral projects
- Common activities related to 4K/8K promotion: demonstrations, fairs and exhibitions



Thank You

**Poznan Supercomputing and Networking Center
Affiliated to Institute of Bioorganic Chemistry Polish Academy of Sciences
Poznan, Poland**