



EIT ICT Labs  
**IDEA CHALLENGE**

8 topics. 8 cities. One challenge.

## WINNERS & OTHER FINALISTS

(Status July, 2014)

## CONTENT



### WINNERS AT A GLANCE

### FINALISTS AT A GLANCE

DESCRIPTION OF WINNERS	Tinnitracks Homey Testfabrik Konux Soma Analytics QGo	Kinexon One Agroptima Horus Avansera 3YourMind LeanXcale	
DESCRIPTION OF OTHER FINALISTS	Kemuri 3D Sound Labs HeadSted SimplyWell Posetrack Mapnaut InPict JukeBoss	Lokkupp txtData Uniquil 720° BitMint VirtualGrasp Snapback Teichert	Evothings Energyency Callstats Playir SecureBeam Stimergy Vi-fi Xpressomics
JUDGES		Health & Wellbeing Smart Spaces Cyber-Physical Systems Future Cloud	

## CONTACT

EIT ICT Labs Berlin

Tobias Heger | Project Lead  
Mobile +49 179 4605700  
E-Mail [tobias.heger@eitictlabs.eu](mailto:tobias.heger@eitictlabs.eu)

# WINNERS AT A GLANCE



## 1<sup>ST</sup> PRIZE

### Tinnitracks



#### Tinnitracks | Health & Wellbeing

mHealth | medical engineering | Tinnitus | music | applies sciences

#### Homey | Smart Spaces

home automation | ambient intelligence | entertainment | natural speech control | consumer electronics



#### KONUX | Cyber Physical Systems

hardware | optical technology | customization | sensors | mechanical applications

#### TESTFABRIK



web application testing | cross browser testing | regression testing | webmate

## 2<sup>ND</sup> PRIZE



#### SOMA Analytics | Health & Wellbeing

mental resilience | b2b | stress prevention | scientifically validated | smartphone based



#### QGo | Smart Spaces

avoid queues | save times | ski lifts | no more waiting in line | convenient way to check queues



#### KINEXON ONE | Cyber Physical Systems

precision localization & motion sensing | smart analytics application | sensor network | IoT | smart factory



#### Agroptima

smart agriculture | cloud application | big data | farm optimization | IoT

## 3<sup>RD</sup> PRIZE



#### HORUS | Health & Wellbeing

blind | face recognition | text to speech | life changing | health



#### Avansera | Smart Spaces

behavioural analysis | hyper targeted marketing | in store movement | product decision path | optimisation algorithms



#### 3YOURMIND | Cyber Physical Systems

3D printing | CAD | software development | industry 4.0 | architecture



#### LEANCALE

cloud database | big data analytics | complex event processing | SQL | transactions

## FINALISTS AT A GLANCE



### HEALTH & WELLBEING



#### Kemuri

ageing | wellbeing | safety | family | prediction



#### 3D Sound Labs

3D sound | hearing ads | binaural | audio signal processing | audiology



#### Headsted

mental health | gamification | mobile | mindfulness | peer support



#### SimplyWell

Health & wellness | mind | food | exercise | sleep



#### Posetrack

quantified-self | posture | wearable | health-tracking | BLE

### SMART SPACES



#### mapnaut

geolocation | geotag | placemark | map | personalisation



#### InPict

display device | information pictures | smart room accessoire | novel information experience | photo frame



#### JukeBoss

engaging | interactive | crowd | music | entertainment

### txtData

#### txtData

natural language processing | semantics | location-based services | language technology | information discovery



#### lokkupp

global indoor localisation | globally scalable technology | anonymous consensus localisation | accuracy close to precision | no pre-mapping



#### UNIQUL

face recognition | payment | access | hands free | security



#### 720°

indoor environmental quality | indoor air quality | workspace productivity | quantified workspaces | occupational health

## FINALISTS AT A GLANCE



### CYBER-PHYSICAL SYSTEMS



#### BitMint

privacy | cyber | digital money | IoT | digitalization

#### VirtualGrasp

human computer interaction | virtual worlds | user experience | gaming & animation | software & licensing

#### SNAPBACK

wearable | gesture | automation | IoT | pointing

#### Teichert Systemtechnik

form sensor | interaction cable | shape sensor | cable-like sensor | position sensor

#### EVO THINGS

tool suite | IoT | b2b | web style development | short-time to market | easily extensible

#### energyefficiency

big data | analytics | iso50001 | smart energy management | industry

### FUTURE CLOUD



#### callstats

WebRTC | Google analytics | Google optimizer | video calls | monitor

#### PLAYIR

gaming | real-time | html5 | hybrid | source code streaming

#### SecureBeam

cloud storage | secure | collaboration | messaging | mobile

#### Stimergy

sustainable | digital transition | societal responsibility | cloud computing | 3<sup>rd</sup> industrial revolution

#### Vi-fix

video-on-demand | mobile cloud | broadcast transmission | distributed storage | wireless communications

#### xpressomics

big data | gene expression | genetics | bioinformatics | cloud



WINNERS  
1<sup>ST</sup> PRIZE

## Tinnitracks

### HEALTH & WELLBEING

mHealth | medical engineering | Tinnitus | music | applies sciences

Tinnitracks is currently available in a first version (web based). At the EIT ICT Labs Joerg Land will present the concept of the mobile App for the new scientifically proven tinnitus treatment for the millions of patients.

The tailor-made notched music training has been proven in clinical trials at the university of Münster. The systematically changed input - generated by filtering your music based on your individual tinnitus frequency - can cause the brain to re-shift its imbalance between excitatory and inhibitory nerve signals in the auditory center back towards a healthy balance between the two.

This treatment is not just about filtering. We build a unique technology that covers all aspects of the treatment.

The Tinnitracks-App offers the perfect set-up of a well build technology, combined with strong industry partners, trained local staff and a superior usability as well as compliance. Medical Engineering at its best.



### JÖRG LAND

- Founder & CEO
- Studied European Business
- Strong background in the IT (Bertelsmann Group, cellity AG, Nokia, Otto Group)

### OTHER TEAM MEMBERS

- Matthias Lanz | CTO & Managing Director, IT development
- Adrian Noetzel | Sound Engineering & Product Management



## SMART SPACES

home automation | ambient intelligence | entertainment | natural speech control | consumer electronics

Homey takes home automation to the next level: it combines the possibilities of home automation with entertainment systems and information services, and is much swifter in interaction compared to current, smartphone-app controlled systems.

It achieves this by combining a smartphone app for remote control with voice recognition and analysis for in-house interaction, significantly reducing time and steps needed to control. Also, the system links tasks and sensors on the background, making it able to intelligently turn up the heat when you approach your house, and combine multiple actions in one command.

Our system will feature numerous technologies and protocols (7 different wireless standards plus infrared), so literally all remote controlled devices are hardware-wise compatible with Homey.

Next to the compatible hardware and natural and swift interface, Homey will be a platform, which allows developers and manufacturers to add in support for their products and services. This makes the device future proof and ever extendable, by both enthusiasts at home and device manufacturers.



### STEFAN WITKAMP

- Creative Technology and Business & IT student
- Interested in Technology, Business and Marketing
- Experienced in sales, representation, finances

### Emile Nijssen

- Creative Technology and Human Technology Interaction student
- Interested in development of consumer-focused (information) technology
- Experienced in development, design, organisation





## CYBER-PHYSICAL SYSTEMS

hardware | optical technology | customization |  
sensors | mechanical applications

In today's world, we find sensors all around us. They help us in our daily routines, in cars and other consumer products. In industry they steer complex production algorithms and manufacturing processes.

Because of the constantly increasing number in applications and demands sensor producers are on the spot. Constrained by outdated measuring principles they are forced to come up with complex software solutions to improve their technology. This leads to sensor failure and unreliable performance coming along with unreasonable pricing.

We developed a new optical measurement technology that improves measuring performance compared to sensors based on mechanical principles.

Taking advantage of optical effects our sensors are faster than common instruments and extremely robust. Through a contactless measurement we reduce temperature vulnerability to a minimum. The modular design of our sensors and use of simple electronics enables us to reduce costs and complexity.

Our technology is easily adaptable and with the help of an intelligent design we are able to measure up to 10 different mechanical measuring units.



### VLAD LATA

- Head of Technology at KONUX
- Masters Electrical Engineering (TUM) and Technology Management (CDTM)
- R&D at BMW und Trend Research at Audi & ARRI



### MICHAEL WAX

- VP of Sales at KONUX
- Masters Industrial Engineering (TUM) and Technology Management (CDTM)
- Strategy Consulting at Bain and Company & Audi Consulting and Product Management and Design at Rohwedder

TESTFABRIK



## FUTURE CLOUD

web application testing | cross browser testing | regression testing | automation | webmate

Today, the world uses web applications such as online banking and internet shopping on a daily basis. If an application behaves incorrect or crashes, customers quickly switch to other providers which are usually just one click away. For nearly all kind of business it is essential that their applications work well across all browsers and platforms. webmate uses the scalability of the cloud to be able to analyse complex web applications. Besides layout differences, the diagnosis provided by webmate also lists deviating behavior such as a checkout button that leads to the shopping cart in the reference browser (usually the developer's browser) has no effect in a cross-checked browser. webmate's unique exploration technique enables it to find such errors even if they are hidden deep down in the application. The result of webmate's fully automated analysis is a thorough report that lists cross-browser problems for complex web applications.

The vision is, that webmate helps to improve the quality of web applications for all platforms and devices all over the internet.



### BERND POHL

- Co-founder of e.Consult AG in 2000, CFO until 2011
- Co-founder of Testfabrik AG in 2013, responsible for finance, marketing, business development and sales
- With both companies in summary winner of 7 awards

### OTHER TEAM MEMBERS

- Valentin Dallmeier | Lead development backend
- Martin Burger | Lead development fronted
- Michael Mirol | Lead software architect & infrastructure



WINNERS  
2<sup>ND</sup> PRIZE



## HEALTH & WELLBEING

mental resilience | b2b | stress prevention | scientifically validated | smartphone based

SOMA's flagship product, Kelaa, is an evidence based mobile resilience programme for employees. The patent pending technology takes biometric measures and personalizes stress interventions based on the data collected by a smartphone only. Kelaa is able to quantify amongst other parameters sleep quality and emotion displayed in phone calls on a scientifically validated basis.

Currently Kelaa is piloting in large Auditing, Law and Telecom companies. Furthermore SOMA also conducts stress research with world leading institutions such as Guy's St. Thomas', UCL and Mayo Clinic.

The technology is proprietary and has been developed by the founders of SOMA Analytics and is based on latest Machine learning techniques (neural networks, deep learning). SOMA helps companies gain better insights in how their employees are feeling, where to invest resources in stress prevention and how to design the workplace of the future.



### JOHANN HUBER

- CEO
- German Engineer by training and Entrepreneur by heart
- Named "HSG Entrepreneur of the Year 2013" in Switzerland

### OTHER TEAM MEMBERS

- Christopher Lorenz | Head of Product
- Peter Schneider | CTO



## SMART SPACES

avoid queues | save times | ski lifts | no more waiting in line | convenient way to check queues

Did you know that an average person wastes about 2 years of their life waiting in queues? In today's fast-paced lifestyle, waiting in line becomes a major contributor to people's stress and frustration. Whether it be for a line in museums, transportation systems, ski lifts, or a supermarket - NO ONE wants to wait. Wouldn't it be nice to have a system readily available online or on your smart devices where you can always check if there are queues or not in the places you want to go to? A system where you can always see for an instance which museum in town has the shortest waiting lines, which ski lift in a ski resort brings you up on the mountain fastest, or which attraction in the fun park has the shortest queues?

QGo (Queue-Go) is a system which uses graphical data collected through cameras and analysed through an algorithm, in order to quantify the number of people in a queue and estimate the amount of time a person has to wait in line, given the circumstances.



### CHRISTINNE CUYUGAN

- Bachelor of Science cum laude in Psychology at the University of the Philippines
- Master of Arts in Business Global Sales and Marketing Student at the University of applied Science in Steyr
- Community Manager at runtastic

### JAKOB SCHRÖGER

- Master of Science in Business Informatics at the Johannes Kepler University in Linz
- Marketing Specialization through a 1-year study at the Högskolan i Skövde in Sweden
- CEO and Founder of the Start-Up company QGo





## CYBER-PHYSICAL SYSTEMS

precision localization & motion sensing | smart analytics application | sensor network | IoT | smart factory

Kinexon ONE powers the internet of things with smart location and motion data. It is an innovative real time location and motion sensing solution. Besides location and motion it also detects the condition and status of people, objects and workflows.

The core of the system is the Kinexon CELL - a small and lightweight sensor that tracks the 3D position of people and objects with centimeter accuracy. The sensor operates seamlessly, i.e. both in indoor and outdoor environments. A cloud based smart analytics application transforms the data and provides the user with valuable and unprecedented insights. Data can be accessed from any internet enabled device such as PC, smartphone or tablet PC (e.g., iPad).

With Kinexon ONE we enable customers to use smart location and motion data to improve processes and products in terms of quality, costs and time. Our solutions are suited for a number of sectors such as industry, healthcare, logistics, retail, sports, robotics and unmanned aviation.



### OLIVER TRINCHERA

- Diploma in Business Administration in combination with Electrical Engineering, Technische Universität München
- PhD, Institute for Capital Market Research, Technische Universität München
- Founder & Managing Director, Kinexon GmbH, Munich



### ALEXANDER HÜTTENBRINK

- Diploma in Industrial Engineering, Karlsruhe Institute of Technology
- PhD, Institute for Capital Market Research, Technische Universität München
- Founder & Managing Director, Kinexon GmbH, Munich



## FUTURE CLOUD

smart agriculture | cloud application | big data | farm optimization | IoT

Agroptima is an agricultural cloud and a farm management tool. Agroptima's goal is to modernize farming and significantly improve its efficiency, by providing 1) access to real fields' data and 2) a tool to process and manage this data to make better decisions, increase productivity and save costs.

Deployed sensors in fields, tractors and machinery generate and send real time data to our cloud, through an M2M solution.

The interface for the farmer is a very intuitive cloud tool, which allows the farmer to visualize the information of his fields and manage his farm based on data. Through this tool we are also able to send the farmer recommendations to improve the productivity of his farm, thanks to Big Data algorithms applied on the data.

Agroptima is the future of agriculture. Help us make it possible!

## FERRAN GASCON

- Passionate engineer and maker (Co-founder)
- MSc Electronics and Automation Engineer by the TU Berlin and UPC (Spain)
- Hacker, and former CTO of Delizr.de, an e-commerce company helping farmers sell their gourmet food online



## EMILIA VILA

- Launched/helped launch 5 startups in Berlin
- Founded and former CEO of Delizr.de
- MSc Business Administration ESADE Business School & Singapore Management University.

## OTHER TEAM MEMBERS

- Anisia Tardà Solà | Chief agricultural engineer



WINNERS  
3<sup>RD</sup> PRIZE



HORUS

## HEALTH & WELLBEING

blind | face recognition | text to speech | life changing | health

Horus is a small device to be put on any pair of glasses that allows visually impaired people to have a better understanding of the world around them. It interacts with the user through voice and it works standalone.

Its goal is the solution to many of the problems visually impaired people have to face during everyday activities and it would be the first device with its features on the market. Some of the problems we want to solve with Horus are:

- detection of zebra crossings in places where they are not signaled for blind people
- recognition and detection of people without having to touch or speak with them
- learning of objects and products (for example recognising a particular brand of a product) so that the user can be more autonomous
- reading of texts
- detection of road signs

The estimated end user price will be comparable to a common smartphone and since its design fits all glasses, it does not require the user to buy another pair of costly lenses.



### SAVERIO MURGIA

- BSc Biomedical Engineering, pursuing MSc Advanced Robotics
- Researcher in the field of Computer Vision
- Software developer by education and passion

### OTHER TEAM MEMBERS

- Carola Pescolo Canale | Chief Marketing Officer
- Luca Nardelli | Chief Technical Officer
- Benedetta Magri | Chief Financial Officer
- Alessio Mereta | Software Developer

**Avansera**

## SMART SPACES

behavioural analysis | hyper targeted marketing |  
in store movement | product decision path |  
optimisation algorithms

Avansera provides advanced real-time consumer behavioral and product performance analytics in retail environments across all chains and geographical locations. Avansera provides the best and most effective marketing platform to communicate prices, availability, offers and product and store information to profiled consumers.

Avansera Deep Dive provides the best view of what is happening in any store and in any location, in order to improve supply chain processes and inventory management. Avansera's solution is the next level of market research, providing immediate information to producers', manufacturers' and retailers' key personnel and decision-makers on what is going on in the market, and what is expected to happen in near future. No need for guessing, no need for waiting; saving businesses lots money and increasing profit margins.



## CORMAC WALSH

- CEO
- Big data analysis
- Founder

## OTHER TEAM MEMBERS

- Jouni Karvo | Investor Relations
- Thuy Le | Big Data Analysis

## CYBER-PHYSICAL SYSTEMS

3D printing | CAD | software development | industry 4.0 | architecture

With 3YOURMIND creative minds are free to use industrial 3D-Printers with one click. Engineers, architects and modelers don't have to think about complicated 3D-Printing restrictions. Instead of spending weeks on learning 3D-Printing modeling and preparing printable files they are asked to click a button in order to get their professional 3D-Printout.

Our file repair software is accompanied by plugins for major CAD programs, which define the project scope, printability and provide an easy to use interface. This entitles many people to design for 3D-Printing and ensures full scalability. The initial software version is free and binds customers to our web-service. They only pay for the printouts. Professional versions of our software will be licensed to customers and allow use of their own printers. Initially we are targeting sales and marketing departments in architecture, industry and advertisement companies. Our world wide market is calculated to be 37BN €



### STEPHAN KÜHR

- Physics, MA
- Team lead sales of wind turbines
- Founder of Web-design company

### OTHER TEAM MEMBERS

- Aleksander Ciszek | Co-founder & Head of Business Development
- Heinz Ackermann | Business Angel, PR & Finance



## FUTURE CLOUD

cloud database | big data analytics | complex event processing | SQL | transactions

There are three mains problems today in data management:  
1) Databases in clouds do not scale; 2) Analytics require copying data from the production database (a transactional database) to a data warehouse. This process is known as ETL (estimated to cost 80% of business analytics); 3) Many applications require correlating events with stored data, but current DBs cannot correlate events at network rates (millions of per second).

LeanXcale provides an ultra-scalable database that provides full SQL and full ACID transactions in a fully transparent way to cloud applications with standard interfaces (JDBC) that solves forever the scalability of databases removing 100% of the cost of partitioning the DB (sharding). A distributed SQL engine provides big data analytics solution over the production DB providing real-time analytics over current data avoiding the ETLs, and 100% of their costs. Complex event processing is integrated being to correlate millions of events per second with the data.



### RICARDO JIMENEZ-PERIS

- Director of the Distributed System Lab at UPM, PhD in Computer Science
- Expert in scalable data management (coordinator of 5 European projects on this topic) and co-inventor of 3 patents on this topic
- Attracted and managed 7 million Euro funding in the last few years and managed teams in FP7 Projects of over 40 people

### OTHER TEAM MEMBERS

- Miguel Santandreu | Financial manager
- Ana Jimenez | Quality manager
- Marta Partiño | CTO
- David Jimenez | Client support manager



OTHER FINALISTS  
**HEALTH & WELLBEING**



**ageing | wellbeing | safety | family | prediction**

Kemuri has prototyped a multiple sensor unit that continuously collects ambient data from the kitchens of vulnerable people living alone. It is sent to a Web service that learns normal patterns of activity. Every hour Kemuri compares predicted activity to actual activity and records a 'weak' warning if it is not a good match. Several hours of 'weak' warnings will create a 'strong' alert and send a text message to a nominated person. Family members, or carers, can view the wellbeing records at any time from a Web browser or Smartphone.

A primary objective is to ensure that a person is checked for wellbeing every day and will not lie unattended after a fall, or otherwise unable to call for help. It enables distant families to get peace of mind and avoid the problems of hypothermia, poor nutrition, dehydration and immobility. Sensor units conform to local standards and the Web service provides world-wide access.



## LEONARD ANDERSON

- Health and Social Care programme manager for UK local authorities
- Board member of Local Government Standards and Adult Social Services ICT Committees
- Advisor on UK Parliament ICT Policy for Local Government

## OTHER TEAM MEMBERS

- Lawrence Archard | Sensor Engineer
- Mike Anderson | CTO & Business Strategy Consultant
- Yodit Stanton | Telecommunication Adviser



## 3D sound | hearing ads | binaural | audio signal processing | audiology

The Problem: high end digital hearing aids are designed to improve speech intelligibility in complex sound environments. The state of the art technology works fine for simple environments (face to face discussion in a quiet place), but does not perform well in complex and noisy situations. This is because the processing used in the hearing aids removes the spatial part of the signal and the human brain cannot leverage anymore its powerful ability to discriminate sound sources in noise (known as cocktail party effect) which is based on the spatial cues interpretation of the audio signal.

3D Sound Labs Solution: We will develop a small 3D microphone that will capture the spatial part of the sound and wirelessly feed this signal to the hearing aids, through a binaural rendering engine (binaural rendering = 3D audio over headphone rendering) which will recreate a natural 3D audio sound that the brain can fully leverage to extract speech from noise.



### XAVIER BONJOUR

- Several senior executive positions at Technicolor (FR), LG (NL), Philips (FR, NL)
- Board Member at Movea, a technology company specialized in data fusion
- Holds a MSc in digital techniques from Heriot-Watt University, and a MEng from ESIEE

### OTHER TEAM MEMBERS

- Dimitri Singer | Product strategy & development
- Renaud Seguier | Senior Scientific Advisor



mental health | gamification | mobile |  
mindfulness | peer support

Each year, more than 160 million Europeans suffer from mental issues like anxiety, high stress, sleeping problems, low mood and depression. Only 1 in 3 people get help for these symptoms. Barriers to getting help may include stigmatization, limited access to health care, and the cost of care.

Headsted provides digital services that everyone can access 24/7. Our service learns and adapts to a personal profile, allowing us to guide each user to the most suitable and motivating psychological exercises. Each exercise is very brief, usually about 2 to 5 minutes in length, and provides effective techniques for relaxation, mindfulness, or other psychological training. People love our content: more than 95% of respondents would recommend our social anxiety program.

We offer our programs to individuals, health care providers, and employers. We work together with health care and non-profits to reach everyone who needs our help. Headsted will enter other European markets in 2015.



## TONI VANHALA

- CEO of Headsted Co
- 10+ years of experience in academic and commercial R&D of health technology.
- Ph.D. thesis on regulating emotions using technology was approved with distinction (top-10%) in 2011

## OTHER TEAM MEMBERS

- Kirsikka Kaipainen | R&D
- Päivi Lappalainen | researcher at Department of Psychology

**health & wellness | mind | food | exercise | sleep**

SimplyWell - Life is combination of SimplyWell book and social health app that is a fun and easy way for both pros and private users to promote and manage health.

SimplyWell -life has four main themes: Rest, Motion, Nutrition and Mind, each with eight own graded health tasks to choose from. From these 32 health tasks ranging from drinking enough water to high intensity training we are sure that everyone can find their own easy starting point. SimplyWell offers information on how to reduce stress and improve your health and wellbeing. Just choose your own level to start your health journey from and challenge your friends to join you. Do it together!

In SimplyWell -Pro version the health care provider can help you to choose the right tasks according to you health concern. Pro version also helps health care providers work easier, faster and more cost effectively.

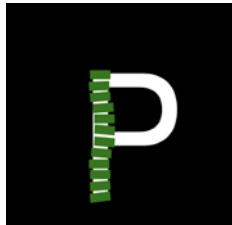
In SimplyWell's Health Stock you can compete with your friends, get support and compare your progress to your friends' on a country, Europe and USA level.

**KRISTIAN EKSTRÖM**

- Doctor of Chiropractic
- Health and wellness coach
- Author of "SimplyWell - four steps to health" book

**OTHER TEAM MEMBERS**

- Olli Tiihonen | CEO of Houndmedia (Internet solutions)



quantified-self | posture | wearable | health-tracking | BLE

It is estimated that 80% of the population would at some point in their life, suffer from back pain due bad posture. The direct medical cost associated with back pain is staggering, measured in billions dollars. The question isn't "If" but "how soon" one will need to improve their posture.

Posetrack intends to create a niche in Posture related wearable electronics. Our medically designed gears are integrated with an array of sensors that track your spinal position, while giving real time feedback on the body posture. The device rapidly learns and adapts to your body type and the activity you are performing. Helping you maintain good body posture thereby reducing avoidable injuries.

Wearable devices have now become fashionable with well-designed products like Jawbone up and nike fuel bands. This is verified by 750 million dollar in sales of such devices in 2012 and project to grow at a 40 percent year on year by conservative estimates."



## KARTIK KARUNA

- Embedded Systems Engineer at a Solar research Firm, Stockholm
- Research Assistant & Masters student in Embedded System From KTH, Sweden
- Product design & manufacturing in China

## OTHER TEAM MEMBERS

- Sriram Elango | Marketing & Finance Lead



## OTHER FINALISTS SMART SPACES





## geolocation | geotag | placemark | map | personalisation

Mapnaut is a mobile app that allows users to create and share bookmarks on physical places (placemarks), and visualise them in a distance-based feed (the spaceline).

By creating, commenting and re-saving placemarks, users can join contextual real-time conversations about any location, share media, visualise maps and interact directly with local stakeholders, all through simple 140-characters-long geolocated tweets. Hashtags and mentions work both as links and filters, allowing to dynamically generate categories, direct messages to single users, and discover new and always relevant information.

Custom promoted in-app actions such as redeeming a coupon, subscribing to a mailing list or reserving a service with a single tap can be added by business users to any placemark and made immediately available to customers.

Mapnaut is shaped to collect real-time and continuously updated information, avoiding the need to prepare and maintain a static database by simply relying on highly subjective, user-generated content which is always precisely geolocated. Finally, there's life on maps.



### DAMIANO GUI

- Master's Degree in Visual and Multimedia Communication Design, IUAV University of Venice
- Researcher in Human-Computer Interaction at MIT Senseable City Lab
- Application developer for Adobe Inc.

### OTHER TEAM MEMBERS

- Vladimir Shulyak | Back-end development
- Mariano Viola | Design and Front-end development



display device | information pictures | smart room  
accessoire | novel information experience | photo  
frame

InPict is a novel display device opening a new experience and feeling of digital content by making its access as simple as viewing a picture in a photo frame. Simply hang a decorative piece of information on a wall, place it on a table or take it from one place to another and it will always be up to date. Take an InPict device, put it in the picture frame you prefer and choose from various "Picts" to display dynamic content in adapting designs. Just imagine the weather forecast, your car's parking location, a daily cartoon, public transport timetables, your day plan, classifieds from the neighborhood or merely the time of day.

InPict is also the perfect link between users and smart sensor devices by integrating information such as temperatures, physical mailbox status, soil moisture or room climate into homes and offices. Wireless charging, very low power consumption and minimalistic user interaction make it extremely flexible and comfortable to handle.



## DOMINIK LAHMANN

- Computer Science and maths background
- Software Campus participant with Startup experience
- Fit in coding, prototyping, graphic design and cooking

## PHILIPP NORDHUS

- Computer Science graduate with deep practice-oriented project experience
- Domain expert in hardware, systems, software and algorithms
- Technical director





engaging | interactive | crowd | music | entertainment

The Jukeboss mobile application invites the guests of the event to vote for their favorite songs and build the music selection in a collaborative way. The app also shows the current playing song, allowing guests to share what they are listening on social media just by tapping on it. At the event location, a big screen will show a visualization of the top voted songs and leaderboards about the users' activities which the host of the event can use to encourage participation and offer prizes.

Jukeboss automatically selects the next song to be played according to its amount of votes, or it can be integrated with the most common professional DJ tools. This is the only "collaborative jukebox" that has a special version for DJs and it brings together the collaborative interaction between guests selecting songs with the expertise of the DJ who will have the final call, picking the best moment to play them ensuring a great musical journey through the event. It's a reality that DJs always receive song requests while they are performing but with Jukeboss they can manage that in an organized and easy way without being bothered.



## GERMÁN LEIVA

- Information Systems Engineer from Argentina (UTN)
- EIT ICT Labs master student in Human-Computer Interaction and Design at KTH in Stockholm, specializing in Mobile and Ubiquitous interaction
- Worked as mobile developer at the startup Fanwards, as a software engineer in Telecom Arg and as a programming professor in two argentinian national universities

## OTHER TEAM MEMBERS

- Carla Griggio | CEO
- Hanna Schneider | Head of Marketing

## **txtData**

natural language processing | semantics| location-based services | language technology | information discovery

txtData's semantic technology automatically analyses text and determines for which locations it is relevant. We have a strong focus on local and hyper local content, and detect a wide range of location names in unstructured text: addresses, street names, POIs, venues, neighborhoods etc. We also detect which of the mentioned locations are central for the text. With this technology textual content becomes browsable and discoverable by locations, which is interesting for any publishers of local content, e.g. local news, city blogs or travel guides. We also enable the easy creation of location-based service (LBS) apps, which show users which articles, news or blog posts are relevant to their current surroundings.



### MICHAEL KAISSER

- PhD in Natural Language Processing from the University of Edinburgh
- In the past Program Manager at Microsoft Bing and Senior Researcher at AGT R&D.
- Since 2013 Co-Founder of txtData, a startup which offers Semantic Technologies

### OTHER TEAM MEMBERS

- Indira Gonzalez | Business Developer



global indoor localisation | globally scalable technology | anonymous consensus localisation | accuracy close to precision | no pre-mapping

Lokkupp offers privacy preserving indoor positioning, instantly available at any populated venue in the world. The technology is based on groundbreaking research from KTH Royal Institute of Technology. The concept of Lokkupp was developed during the Clinical Innovation Fellowship program, sponsored by KTH Royal Institute of Technology, Karolinska Institute, and Stockholm läns landsting during 2013-2014. The globally scalable business model of Lokkupp is derived from a thorough design thinking process, ethnographical studies of end-users, customer journeys, interviews, and observational studies at the Karolinska University Hospital. Lokkupp offer both a technical platform for indoor localization and end user services for specific verticals. Lokkupp is a Stockholm based startup with an international founder team. We have the skills and passion to soon bring Lokkupp to a smartphone near you.



## MARIA LINDSTRÖM

- ICT Marketing Manager, and Design Thinking Evangelist
- Cofounder of Humany inventing web 2.0 and social media before it was a global phenomenon
- Creator of the shoe brand and collection Inga from Sweden

## TORBJÖRN NORD

- PhD in Automatic Control from KTH Royal Institute of Technology
- CEO of the best startup by young professionals in Finland
- Today both a scientist and entrepreneur





## face recognition | payment | access | hands free | security

Uniqul is an access control system, which uses face recognition to identify users. Uniqul users do not need to use or bring any traditional means of identification, be it cards, mobile devices or passwords – getting access to a service or device will be a matter of just walking up to it.

The first applications for Uniqul include places where speed and convenience are core factors - retail stores, airports and gas stations. By teaching infrastructure to identify its users, i.e. installing Uniqul cameras, it is possible to significantly improve the current level of service and to offer new, exciting opportunities to the clients.

Our tracking algorithm enables the user to move freely in front of the camera, and the initial recognition can be made from up to 10 meters. We've also put down a lot of time on ensuring that the security and accuracy of the system are as good as possible. We've coupled all of this together to create a system which can be used hands free and effortlessly.



### OSCAR TUUTTI

- First time founder
- Masters in Law (business) from University of Helsinki
- 2 years of experience within Company Law

### OTHER TEAM MEMBERS

- Ruslan Pisarenko | CBD and Founder of Uniqul
- Valentin Soloview | Lead Developer
- Marko Maksimoff | Board Member

 The image cannot be displayed. Your computer may not have enough memory to open the image, or the image may have been corrupted. Restart your computer, and then open the file again. If the red x still appears, you may have to delete the image and then insert it again.

## indoor environmental quality | indoor air quality | workspace productivity | quantified workspaces | occupational health

How much do you know about your indoor environment? Research shows that we spend 90% of our time inside, the quality of these spaces being of great consequence to our health. But indoor environmental quality has been vastly ignored. A majority of employees in large organisations report issues about their workplaces.

At 720°, we assist organisations in providing healthy and productive workplaces to their employees. Our solution utilises data from indoor environmental sensors and systematically collected information on occupational health and well-being to deliver insights on current conditions to employees and organisations. Outcomes of the analytics consequently lead organisations to preventive actions and improvements, resulting in better workplace environments and improved employee satisfaction.

We believe in human-centric and data-driven workplaces, we believe in advancement of life quality through technology.



### TOMAS NOVOTNY

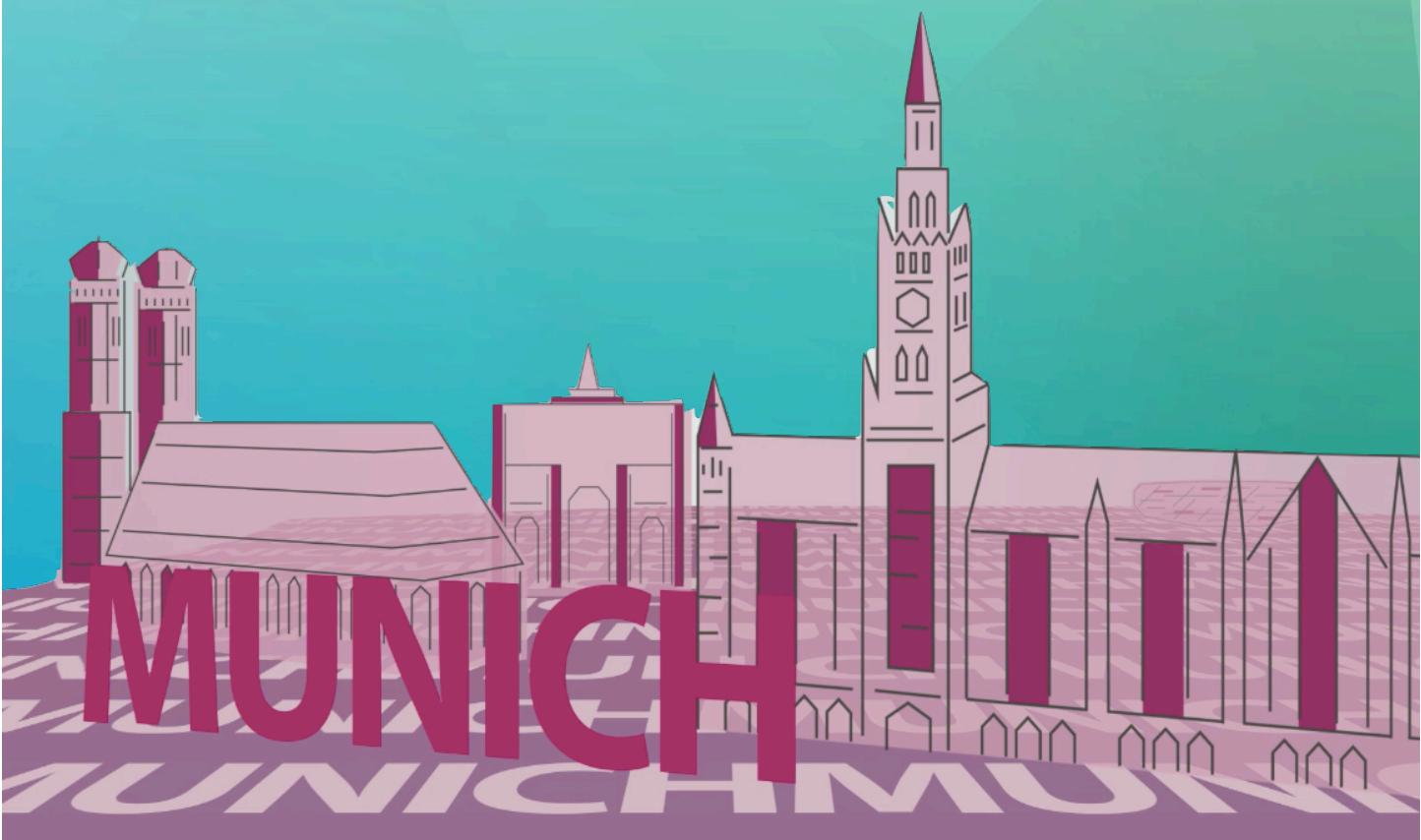
- Founder & CEO of 720°
- Entrepreneurial background from IT & health sectors
- Education from Aalto University & Seoul National University

### OTHER TEAM MEMBERS

- Rick Aller | Sales Development
- Simon Burg | Artificial Intelligence, Service Design & Engineering
- Ram Sankar | MSc in Service Design Engineering
- Martti Tenhola | Biomedical Engineer



## OTHER FINALISTS CYBER-PHYSICAL SYSTEMS





privacy | cyber | digital money | IoT | digitalization

The Internet of Things is expected to connect some 50 billion "things" by 2020 -- all sharing the public information highways. The information revealed by these connected devices will violate the privacy of concerned people. The common ciphers are computationally prohibitive for the low computing power of sensors, monitors, and field report hookups.

We propose to facilitate secure device to device communication in the emerging IoT, to use a suitable strong cipher extremely fast with low level computation that may even be incorporated in RFID devices..

Moreover: many of the IOT connected devices will be offered on a service basis where a time used or resources used will become a basis for payment. We propose to use a disruptive protocol for digital money payment in real time (pay-as-you-go) for all services on the IoT, including rental and use services of interconnected nodes. No invoices, no collection, and no personal database to be hacked. Privacy and efficiency are nicely served.



## AMNON SAMID

- Serial entrepreneur & experienced high-tech executive
- Co-founder and chairman of ICD
- Providing security services to most of the Fortune 500 in Asia Pacific.

## OTHER TEAM MEMBERS

- Avner Etzion | Electro – Optics Development
- Gideon Samid | Specialized in Cyber Security

## VirtualGrasp

Bring your Hands into Play

human computer interaction | virtual worlds | user experience | gaming & animation | software & licensing

VirtualGrasp is the first commercial software solution for real-time animation of hand-object interactions. Based on solid research results in robotics, VirtualGrasp enables 100% realistic hand and finger grasping in computer games, 3D animation or virtual reality.

With the recent rise of virtual reality devices for the public, like the Oculus Rift or Sony Morpheus, everybody can finally experience the magic of full visual immersion into virtual worlds. The only problem is: what do people do when they get there? VirtualGrasp turns this passive observer role into an active and engaging way of interacting with virtual worlds, enabling the ultimate way we all interact with our environment: our hands.

As a software solution, VirtualGrasp is cost-effective for developers, flexible to use, and compatible with many existing and upcoming input devices, like Kinect, LeapMotion, Myo, or just your keyboard and mouse. Visit our website to learn more: [www.virtualgrasp.com](http://www.virtualgrasp.com)



## KAI HÜBNER

- Ph.D. in Robotics from University of Bremen, Germany (2006)
- Researcher in Autonomous Robotics at KTH, Stockholm, Sweden (2007-2010); Senior Algorithm Developer at Tobii Technology, Stockholm, Sweden (2011-2013)
- Inventor and co-founder of VirtualGrasp

## OTHER TEAM MEMBERS

- Dan Song | Co-founder & Researcher

&lt;SNAPBACK&gt;

**wearable | gesture | automation | IoT | pointing**

We facilitate users interaction with electronic devices in complex environments.

User can interact with devices in the surrounding by pointing his smart wristband to a Point Of Interest (POI). After engaging a POI, user is coupled with the target device which can be controlled through simple gestures.

User behavioural data are collected and sent in realtime to the infrastructure. This data can be analysed to provide the environment with predictive and adaptive automation capabilities. This technology applies to a number of cyberphysical systems. In an assembly line, workers can interact with a workstation; in homes, people can remotely control smart TVs and other appliances. In an outdoor context, users can query bus poles to get informations on incoming buses.



## GIUSEPPE MORLINO

- PhD in Computer Science
- CEO at Snapback: touchless and sightless interfaces for smart devices
- Research in Artificial Life, Evolutionary Robotics, and Cognitive Science



## MARCO MEZZAVILLA

- PhD in Information Engineering
- Principal Engineer and CoFounder at Snapback S.r.l.
- Researcher on 4G Wireless Networks at Qualcomm Inc. and NEC Europe Labs



## form sensor | interaction cable | shape sensor | cable-like sensor | position sensor

Based on their positioning in space, our cable-like form-sensors create a virtual three-dimensional model of their current layout. This model of the cable's position and form mirrors precisely the actual cable's position and form in real time. This opens up numerous applications for the detection of shape and position as well as capturing interaction (InCa: Interaction Cable).

Application areas are the intuitive control of handling devices or complex machines. "InCa" is a six degree of freedom sensor for targeting 3d positions and directions directly in space. Other application areas comprise the monitoring of packaged cable or hose assemblies. Critical positions, forms or velocities can be detected. Velocity information can be used for automated dosage of e.g. adhesives.

Capturing the shape of cable-like objects is new to the market. This technology is unique and patented. It enables new products and new features of established products.



### JENS TEICHERT

- CEO of Teichert Systemtechnik GmbH
- Expertise in Computer Science (Dr.-Ing.)
- Expertise in Electrical Engineering (Dipl.-Ing.)

### OTHER TEAM MEMBERS

- Flavius Hirceaga | Product Development
- Katja Teichert | Administration & Communication



tool suite | IoT | b2b | web style development |  
short-time to market | easily extensible

The need of our prospective clients have is to develop a large number of mobile applications for the IoT in an efficient and scalable way. The problem that we solve is to reduce costs and cut lead times for development of mobile applications for the IoT enabling an efficient development process for our customers. An advantage of our solution is that the costs of the development process can be reduced dramatically - up to 5 times - as compared to traditional methods. Our platform is also specially formulated to manage the technologies and standards used within the IoT area that differs significantly from other areas. Our platform also fits particularly well with our prospective customers from a knowledge perspective when it is very common for companies in this sector are already working with Web technologies, which are the technologies used for the development of the apps in our platform. The threshold for customers to start using our platform becomes very low given a matching skillset, hence minimal start-up costs for the client, which also advocates for the sale.



## ALEX JOHNSON

- Pioneer in digital publishing and IP-based information sharing systems
- Seasoned serial entrepreneur within mobility and internet technologies
- Research background in digital media from Royal Institute of Technology, Stockholm and Stanford University, CA.

## OTHER TEAM MEMBERS

- Tomas Uppgard | Co-founder & CEO
- Mikael Kindborg | Ph.D. Computer Science
- Fredrik Eldh | Mobile Developer



big data | analytics | iso50001 | smart energy management | industry

The idea behind Energyency is to provide industrial manufacturers with analytical real-time web analytics tools. Energyency operates big data algorithms and machine learning that continuously scans all the information systems in the factories (production, maintenance, energy, etc.) and provide real time energy monitoring, assessment and action plans on web and mobile devices.

This user-friendly and innovative SaaS software suite is customized according to users, from operational (project managers, operators) to decision makers (plant managers, ExCom).

Energy analytics continuously supplied by Energyency algorithms allows manufacturers to drive and extend their own energy management system and to achieve, maintain and accelerate up to 20% energy savings without investments and with better competitiveness.



## ARNAUD LEGRAND

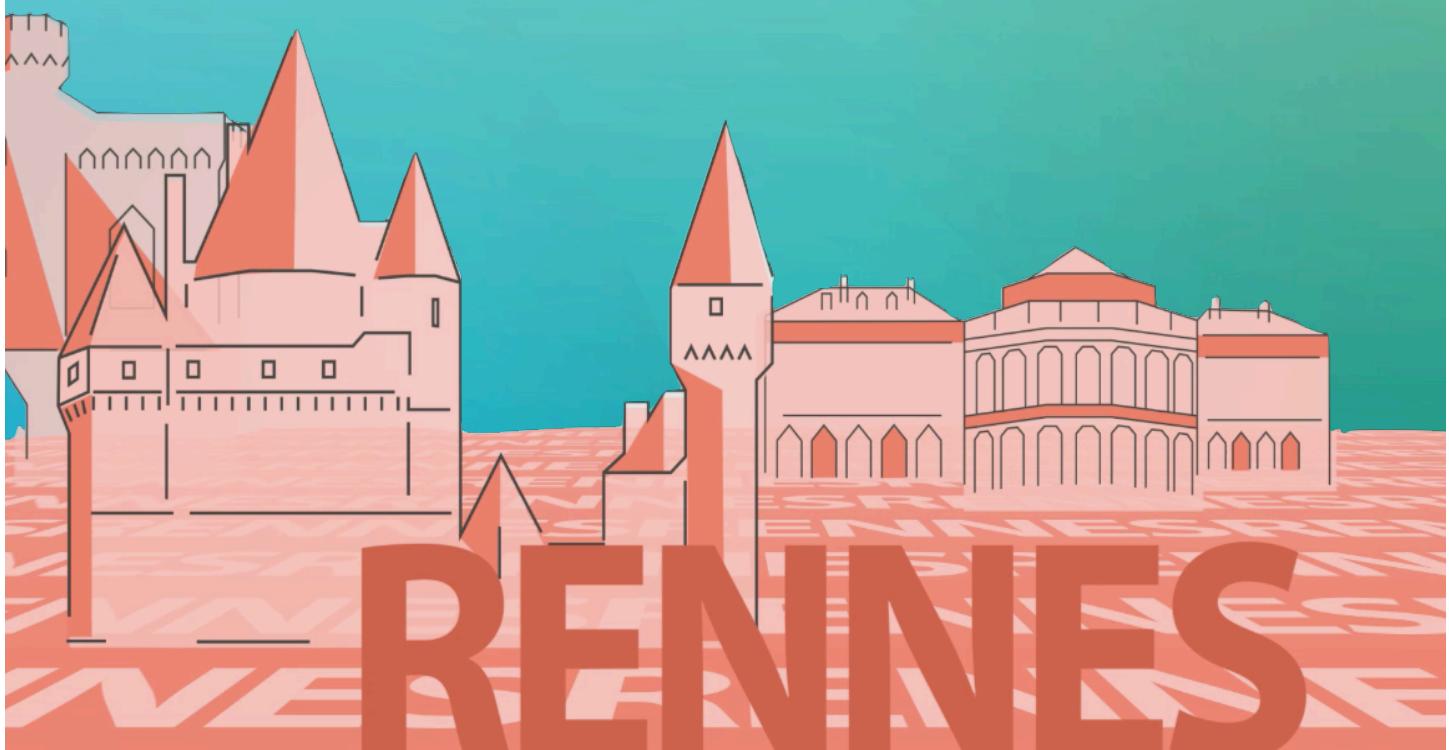
- M.Sc. Paris Institute of Technology for Life, Food and Environmental Sciences
- MBA Entrepreneur Collège des Ingénieurs Paris
- CO2 and Energy Consultant EY & Marketing Officer Blu-e

## OTHER TEAM MEMBERS

- Sebastian Duburque | VP Sales
- Francois Ducorney | Administration & Communication
- Erwan Daubert | Scientific Director



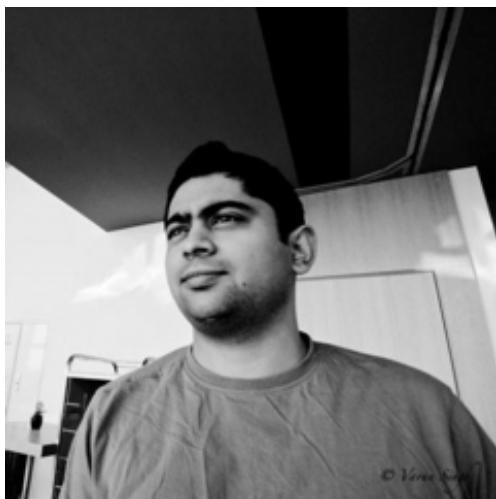
## OTHER FINALISTS FUTURE CLOUD





WebRTC | Google analytics | Google optimizer | video calls | monitor

callstats.io monitors and manages the performance of video calls in an WebRTC application. We provide a Javascript client library to measure the performance of a browser endpoint. The dashboard provides service- and call-level metrics; enables WebRTC service providers to identify endpoints/ users experiencing poor media quality; and diagnose networking issues.



## VARUN SINGH

- Final year Ph.D. Student at Aalto University, Multimedia Communication and Economics
- IETF participant in RTP-related protocols, author of several RFCs and Internet Drafts
- Worked at and collaborated with several industry partners: STMicroelectronics, Nokia Research, Cisco, Ericsson

## OTHER TEAM MEMBERS

- Joerg Ott | involved in architecture design & standardization of key integration elements
- Marcin Nagy | developing algorithms for diagnosing the quality of service
- Shaohong Li | Infrastructure and Scaling



**gaming | real-time | html5 | hybrid | source code streaming**

Today cloud is defined by real-time streaming of data, be it video or information. The next generation of cloud, the real-time cloud, will be defined by the streaming of logic. Where you can live update source code across devices without paying the iteration penalty of compilation, or publishing through walled app store gates.

To dictate this future we're working on a real-time development platform that allows you to update source code, art assets and designs in real-time across devices and app stores. With the uniqueness about this solution being, that we run-time convert streamed HTML5 source code into native, enabling the flexibility of web standards and the performance of native.

We also provide visual design tools to take the traditional design iteration costs and steep learning curves of coding out of the equation. Our visual design tools are one-to-one map with JavaScript, so you can visually design code changes, or write code that is visualised back into our design tools.



## ASHRAF SAMY HEGAB

- Former BAFTA award winning console games developer for Activision, Vivendi and Codemasters
- Former Technical Lead and author of several patents for France Telecom R&D
- Currently working on a revolutionary real-time code streaming solution for mobile cloud

### OTHER TEAM MEMBERS

- Alexandra Goddard | 3D design & animation
- Foyzul Hassan | Prolific 2D artist

## SecureBeam

cloud storage | secure | collaboration | messaging  
| mobile

We love cloud storage services like Dropbox, Google Drive and iCloud and how they enable us to backup and share our stuff. But we consequently ran out of free space in our cloud storage accounts. Furthermore our data is scattered across all these different cloud storages and we miss proper protection of our files.

So we built SecureBeam: SecureBeam protects your data right on your smartphone and splits the encrypted files over all cloud storages. SecureBeam is the easiest way to share and collaborate on your files securely - right on your smartphone: Just swipe a file, select the contacts to collaborate with and you're done. You can even chat instantly with your colleagues - secured by industry-strength encryption, right on your smartphone.



### MARTIN VASKO

- Ph.D. in Computer Science
- Strong background in lean Startup- and Product-Development
- Loves Cloud-Storages like Dropbox, but misses proper protection of his confidential files

### OTHER TEAM MEMBERS

- Ferry Habasche | Expertise in strategic management, business development, sales



sustainable | digital transition | societal responsibility | cloud computing | 3<sup>rd</sup> industrial revolution

Data centres worldwide produce half the volume of emissions of the global aviation industry and undergo on average one outage per year. Stimergy proposes an architectural innovation that not only makes the cloud energy free, but also makes services hosted by digital infrastructure outage free. This innovation consists in coupling server racks to hot water production systems in secured rooms of residential or tertiary building. Hence, cold water cools down servers, and reciprocally, servers warm up water for the building needs. All these computing units, in a form of a data furnace, are connected together with high-bandwidth links and create a global final energy free data centre. Redundancy is ensured at physical level but also at the logical level. By putting all your applications in different baskets, the new era decentralized data centers makes them always available.



## CHRISTOPHE PERRON

- IT and energy engineer
- Worked in startup as well as international companies
- Founder of Stimergy passionate by challenges, innovation, partnership weaving and synergies

### OTHER TEAM MEMBERS

- Jean-Marc Darrigol | Technical leader
- Michael Mercier | Software development IT infrastructure



video-on-demand | mobile cloud | broadcast transmission | distributed storage | wireless communications

While a classic cloud service builds on a central storage of the data, recent developments push the storage further into the edge of the network, for example multiple storage facilities in different geographical locations. This trend can also be observed in wireless networks, where concepts to extend cloud storage to include the basestations are discussed. Still, this will not solve the problem of insufficient wireless capacity on the last hop to the service user. This is where our Broadcast Group Coding (BGC) technology takes effect by including caches at the user devices and the wireless link itself into the the cloud architecture.



## MICHAEL HEINDLMAIER

- Research assistant at the Institute for Communications Engineering, TU München
- During his research, he has developed an extensive knowledge in coding for wireless communication
- His research has been awarded with the Qualcomm Innovation Fellowship in 2013

## OTHER TEAM MEMBERS

- Andreas Dotzler | CEO
- Thomas Kühn | CFO
- Maximilian Riemensberger | CTO



big data | gene expression | genetics |  
bioinformatics | cloud

Xpressomics is a cloud platform for gene expression analytics. It works by allowing users to upload their data files and run gene expression analysis straight from the browser. We aim at driving innovation in the cloud through our value-add application in genetics.

We are putting the power of genetic data analytics into the cloud. As the field of sequencing and genetic data is exploding, our team focuses on the analytics side of it. We are developing easy to use tools for scientists / biologists / doctors to analyze genomic data without the requirement for programming expertise or extensive knowledge on statistics. We have built our solution optimized for the cloud. We have a proprietary cloud server setup permitting users to run the analysis in our cloud or we can set up the platform as a private cloud on site.



## HENDRIK LUUK

- Xpressomics R&D
- PhD in Neurosciences
- Software development and data analytics

## OTHER TEAM MEMBERS

- Viktor Kikerist | experienced in ICT industry, running companies and starting businesses



# JUDGES

## JUDGES | HEALTH & WELLBEING



**Jean H. A. Gelissen**

Action Line Leader Health & Wellbeing, EIT ICT Labs



**Patrick Strating**

Eindhoven Node Director, EIT ICT Labs



**Fabio Carati**

Business Development Accelerator Trento Node, EIT  
ICT Labs



**Carla Scholten**

Director, Embedded Fitness



**Bert Gyselinckx**

Managing Director, Holst Centre



**Guido Hegener**

Partner, XL Health

## JUDGES | SMART SPACES

EIT ICT Labs  
**IDEA CHALLENGE**



**Alain le Loux**  
Business Accelerator, EIT ICT Labs



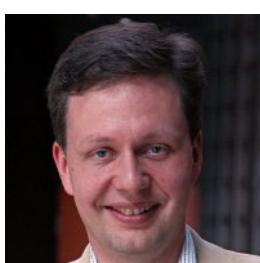
**Jari Mieskonen**  
Managing Partner, Conor Venture Partners



**Risto Valtakari**  
Managing Partner, Gottberg Services



**Pertti Kasanen**  
Partner, Hitseed



**Petri Liuha**  
Action Line Leader Smart Spaces, EIT ICT Labs



**Tapio Siik**  
Head of Aalto Center for Entrepreneurship (ACE)

## JUDGES | CYBER-PHYSICAL SYSTEMS



**Dr. Holger Pfeifer**

Action Line Lead Cyber Physical Systems , EIT ICT Labs



**Michael Baum**

CEO, FOUNDER.org



**Paul Jenkins**

Head of Strategic Programms British Telecom



**Stefan Tirtey**

Director, SoundCloud



**Dr. Sven Scheuble**

Vice President and Head of Technology to Business at Siemens AG



**Dr. Ralf Schnell**

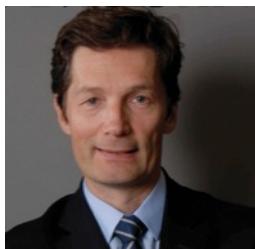
Chief Executive Officer, Siemens Venture Capital



**PD Dr. habil. Bernhard Schätz**

Management Board Member, Fortiss GmbH

## JUDGES | FUTURE CLOUD



**Alain Rodermann**  
Managing Partner, Arenatis Capital Partners



**Björn Hovstadius**  
Business Development, EIT ICT Labs



**Jakob Haesler**  
Co-Founder, tinyclues



**Janne Järvinen**  
Director, External R&D Collaboration, F-Secure



**Joe Weinman**  
Senior Vice President, Telx



**Praveenjothi Paranjothi**  
Investment Manager, European Investment Fund

## JUDGES | FUTURE CLOUD



**Stéphane Amarger**  
Paris Node Director, EIT ICT Labs



**Tua Huomo**  
Action Line Leader Future Cloud , EIT ICT Labs



**Will Cardwell**  
VC Expert, Aalto University