

Playful City – Augmented Reality for City Making

Time to play! Bring your ideas in the process of collaborative city making and keep Paris floating by playing Floating City. The second game we've prepared for you, PoliCity, is an augmented reality game. You will have the chance to slip into one of the three roles – the social player, the economist or environmentalist player – and realize infrastructure and activity plans for different districts of Paris. **Find out how you can influence city making!**
Limited places (15), secure yours!

Personal information

First and last name*

Teodora Constantinescu
Georgi Kostov

Organization and function*

Tell us about the organization where you work and your position.

Hasselt University, Researcher, Belgium
Playful Interactive Environments, Researcher, Austria

Social media*

Share with us your Twitter, LinkedIn, Facebook page, website and / or any other relevant media.

Tell us a few words about yourself...*

Teodora Constantinescu is an architect and urban designer with a Master's degree from the Katholieke Universiteit Leuven, Belgium. She is a member of the Architect's Chamber and Urbanist's Chamber of Romania since 2012. Since 2014 she is a researcher within the Spatial Capacity Building research group at Hasselt University, Belgium. She explores themes such as

spatial capacity building, spaces of local economies, digital social innovation, urban games and spaces of multicultural micro economies. Her research topic focuses on The Role Games Play in Re-valuing Spaces for Work.

Georgi Kostov is a game developer and researcher with a Master's degree in Interactive Media from the University of Applied Sciences Upper Austria. He explores novel technologies such as virtual and augmented reality and their application in interactive art installations and serious games. His projects typically involve multiple users in co-located spaces in order to explore social interaction through digital means. He is also interested in urban development, blockchain technology and whatever comes next.

Describe your expertise and experience in relation with your proposed contribution *

If you have published papers, given talks, presentations or led similar projects, tell us now and share related links!

1. Developed The Invisible Cities Game: a card game designed to reflect with citizens over the value of heritage, collect and tell stories of the built heritage in the city of Genk. It aims to stimulate discussion and decision making among inhabitants about what buildings they feel are important to keep for the future to reflect with citizens over the value of heritage. The game it is now being used by the Participation Department of the municipality of Genk in order to establish this dialogue with the citizens.

2. Paper and Conference presentation: "Civic Participation: Serious Games and Spatial Capacity Building" - Proceedings paper at the MEDIACITY 5 International Conference, 1-3 May 2015, Plymouth University, Plymouth, UK

3. Conference Mind Mapping: at the 'Design, Social Media and Technology fostering Civic Self-Organisation' conference, track 1, 21-22 May 2015, University of Hasselt, Belgium

4. WeForWork project: involved in the literature review on work and work spaces, 18th June 2015, Hasselt, Belgium

5. Labo XX project: literature review and analysis on coworking spaces in Antwerp, 27th August 2015, Antwerp, Belgium

6. Opening of the De Andere Markt Living Lab: De Andere Markt - The Other Market, is an open design lab wherein designers, researchers, citizens, policy makers, creative professionals, etc., think about the future of 'work' in Genk, Belgium. Unemployment is often being addressed by decision makers and unions via a top-down approach via e.g. implementing policies, programs and projects that aim to create jobs, (co-) working spaces and platforms or create better conditions for jobs. However, citizens are too little involved in the debate on these work-related aspects. The region of Limburg (BE) faces -especially since the closure of the Ford factory in Genk- a great need for enhancing the public debate on (local) work, workspaces, conditions and tools (to create, find, share or experience work) as well as their organisation in the city/regional space.

The Other Market is an ecosystem where the research is not carried out in closed design studios, but via a systematic participatory approach, integrating research and innovation processes. This particular lab is an exploratory platform for researchers/teachers, students, policy makers and local community to collaboratively think and work together on the future of “work”, both oriented at the own neighborhood as on the broader world. Via interventions, games, prototyping and coaching activities The Other Market supports designing or doing future work. We investigate two main questions: How can we use design to engage (often marginalized groups of) citizens in (1) the public debate around work, work spaces, tools and their surrounding conditions? (2) How can we co-design proposals for future work, work spaces and tools?

By exploring these questions, we want to increase people’s capabilities of contributing to the public debate on work spaces, platforms and tools and their organisation in the city/regional space. Moreover, we want to enhance the (democratic) public debate in the region of Limburg on work with a wider range of actors (employed and unemployed, different cultures, gender groups, young and old, etc.). Via this public debate we want to come to new design proposals for work, work spaces and platforms. Finally, we want to connect these proposals to existing initiatives, institutions and organisations. To enhance the chance for citizens to be heard in the public debate around work, we will create supportive actions and tools.

· We collect stories about the skills of inhabitants and (small) organisations in Genk via a mobile market, a cargo bike with which we ride through Genk. This mobile market is a kind of reversed temporary employment agency: we collect and display stories about local skills and conceptions of work, instead of jobs.

- We conduct interviews under the form of individual creative sessions where we reflect together with shop owners and entrepreneurs on how their businesses are functioning and what are the economic and social networks they form.
- We organise Minilabs, wherein we generate new ideas about the future of work through co-design at fixed moments in time. Inspired by stories collected in the streets and in the local businesses, these labs are set up as brainstorming sessions between citizens, researchers, professionals and policy makers.
- Next to the Minilabs, we organise Gamelabs wherein serious games are used as vehicles for participatory prototyping and/or simulations. Abstract, intangible notions such as work or economics are made more concrete by collaboratively prototyping ideas and games. These games will then act as visual tools that support a process of coproduction and participatory design of new types of work, workspaces and tools.
- We organise Designlabs wherein ideas can be materialised into platforms, tools, objects, services or spaces. The most ‘visible’ and physical outcomes of these labs can be proposals/prototypes for the future of work, work spaces and work tools.
- We organise coaching trajectories to enhance the opportunities of products, services, tools or organisations that are generated during the labs to genuinely contribute to the debate about the future of work.
- All the interventions, labs and outcomes are publicly shared via our website, forming The Other Market media channel. We pay great attention to developing tools that support citizens, policy makers, designers etc. in contributing to mediated public debates on work (focused on participatory production of media).

7. September 2015 – January 2016 – City Makers game prototyping at the Playful Interactive Environments, Research Center Linz, Vienna, Austria

8. Journal Paper – City Makers – A serious game to support the co-creation of neighbourhood projects, International Journal of E-Planning, Lisbon, Portugal

9. Paper and Conference Presentation: ‘‘Playing with Interviews – Revealing the New World of Work’’ – journal paper at Work and Play: An Interdisciplinary Conference, 6th June 2016, Manchester, United Kingdom

10. Workshop participation: Open for Citizens/Open Data – workshop paper at PDC – Participatory Design Conference, 15 – 19 August 2016, Aarhus, Denmark
11. De Andere Job – 'The Other Job' workstation is an informal context, a space where job seekers are accompanied by Job coaches and where they can learn/develop skills that help them find or organize work. Together with the job coaches and citizens, we design, build and use the interior of this space with a distance to the labor market making use of available (residual) materials in collaboration with the Fablab of Genk. This interior is designed in close interaction with the urban context in which different actors interact. September 2016, Genk, Belgium
12. Presentation and Proceedings Paper: Mini-Games to Support Participatory Processes – at The Responsive Cities Symposium / Urbanism in the Experience Age, 16 – 18 September 2016, Barcelona, Spain
13. Paper: 'Citynamics'-alternative ways of gathering data from the city for the city – Assembling Cities summer school, 19 – 22 September 2016, ETH Zurich, Switzerland
14. Workshop participation on the use of serious games in 'Doing Architecture: Theories, Methodologies & Praxis' in supporting local economies, June 2017, Cambridge University, UK
15. Festival participation: Ars Electronica Festival 4 –8 September 2014 & 3-7 September 2015 The Game Changer Suite <http://pie.fh-hagenberg.at/projects/game-changer/>
16. Festival participation: Ars Electronica Festival 8 –12 September 2016, CARGO, co-located virtual reality game <http://pie.fh-hagenberg.at/projects/cargo/>
17. Festival participation: Animafest Zagreb 6 – 11 June, PieDeck co-located virtual reality art installation <http://pie.fh-hagenberg.at/projects/piedeck/>
17. Vienna Design Week 29 September – 8 October 2016, Invisible Walls co-located augmented virtuality art installation <http://pie.fh-hagenberg.at/projects/invisible-walls/>
18. Presentation and Proceedings Paper: Singularity: Designing a Cooperative Mixed Reality Game for a co-located setting - DIGRA_FDG 1 –5 August, Dundee, Scotland
19. Presentation and Proceedings Paper: Game Changer: a (game) space for intercultural play? - Cross-Cultural Business Conference 2015, 21-22 May 2015, Steyr, Austria
20. Workshop participation: Wien Spielefest 2 May 2016, Play!UC Games: PoliCity, AR U Gonna GO My Way, Floating Cities

Topic and Contribution Type

I would like to propose: *

To simplify the processing of your proposal, please choose one of the following contribution types. If you would like to propose several contributions, please submit one application per contribution.

workshop

Which of the four tracks does your contribution most relate to? *

If your contribution relates to several tracks, choose the track to which it relates most.

Power

Service

Inclusion (I chose this for us)

Resilience

Within the program track "Inclusion", which issues would you like to address? *

Choose as many as you like

Work

Diversity

Solidarity

Education

Other: collaborative practices, local economies

What is the main question you are seeking to address with your proposal - in relation to cities? *

Be original and specific! Questions such as "how the collaborative economy helps address urban issues" might be too vague, while "Is Uber part of the collaborative economy" has already been extensively discussed. A good question has a specific angle (one of the four tracks: power, services, inclusion and resilience) and deals with a specific topic; whether mobility, energy, waste or consumption...

Are game based methods increasing participatory processes literacy in learning about local economies?

I would like to propose a workshop...

We like workshops because they are the most participative and result-oriented formats. When performed badly, without tight methodology, they tend to be particularly disappointing. Please insist on your methodology and the results you are seeking to achieve!

Workshop abstract *

Please describe the workshop in less than 1200 characters

As local governments grow more and more interested in civic participation, it becomes important to explore available methodologies addressing challenges related with collaborative planning. Games have the potential to foster cooperative environments and ease the understanding process as they provide a framework for setting collective goals. They provide a structure based on rules and mechanics that can steer participatory processes while acting as a porous

communication platform, having the ability to give form to cooperative environments and support actor interaction. The main advantages in engaging different actors via the use of games are civic reflection, development of lateral and vertical trust, as well as civic learning.

The proposed Workshop emphasises the potential and benefits of the use of serious games as tools to engage in collaborative processes and, at the same time, support learning and capacity building over a shared vision of the city. In concrete terms, we propose a Gamified Workshop, where two of our research prototypes - ***Floating City and PoliCity*** - will be played and analysed in small groups. The games are part of the Play!UC project. The wider framework of the project is based on an operative strategy that combines the use of co-located serious games and participatory processes to foster the understanding of complex urban problems.

The Workshop will consist of testing different scenarios on how to improve the city through the development of economic, environmental and social projects. Participants will have the opportunity to gain insight into the basics of serious games for urban development, how can such games be used in various collaborative processes, as well as learn important lessons from the development process they undergo.

Floating City is a brainstorming game where players can bring their ideas and discussion contributions to a topic - for example, how to support local economies in the process of collaborative city development. For each idea, an air balloon is generated, which then pulls the city upwards and helps it fly! The balloons can be “liked” and commented on by the other players - making them bigger and lifting the city even faster. The contributions are saved automatically and are available for evaluation after the end of the game.

In ***PoliCity*** every player slips into one of the three roles available in the game (the economy player, the environmental player or the social player). Together, the players can realize infrastructure and activity plans for different districts of a city. The digital game is played on a printed map using Augmented Reality and Smart Devices.

By playing the two games we aim to achieve a mutual information exchange, where participants will experience the games as environments in which they are developing knowledge and skills that can be applied outside the game context, in the real world. The safe game environment allows for experimentation and exploration giving participants the freedom to improve their understanding of a given topic without any immediate consequences or causing damage. Participants feedback to the methodology as well as to the prototypes themselves is equally important to the outcome of the Workshop that will end with a set of recommendations for the use of games in collaborative planning.

Connected to the already established cycle of the Festival, a half day is destined to the Gamified Workshop and to the debate with participants, game designers and architects, urbanists, sensitive to new trends in city making and involved in collective processes. The presence of novel technology, such as augmented reality and the multidisciplinary and international character, will complete the set of experiences and opportunities produced within

the Workshop. When leaving, participants will receive a 'secret token' to remember the workshop by.

Workshop methodology*

Please describe how you would proceed to organise the workshop, as well as the tools you will use.

1. Pre play debriefing: short presentation of the research project and the games - we explain the design goals and choices made in developing the games
2. Gameplay: Playing the games in small groups of 3 players. The play sessions, each of approximately 30 min, will follow one after the other
3. Collective post play debriefing: Reflect collectively on the lessons learned, strong and weak points of the methodology and the games themselves
4. Discussion and feedback - further ideas for possible games and abstract representation of processes in games for cities are brainstormed.
5. Individual post-play debriefing: Filling in a questionnaire on the game-play
6. Players are given a 'secret token' to remember the workshop by

Tools used: two digital serious games

What will be the workshop's deliverables?*

An object, a prototype, a report, a summary, recommendations, etc.

A summary on the added value serious games bring to a planning process, a collection of people's experiences of the workshop and a set of recommendations on how to use games in collaborative processes. As well, a short movie of the game-play and the workshop will be available.

Room set up*

tables with enough space for A0 print
Chairs, limit of 20 participants

Additional support*

Would you need help to organize the room and / or facilitate the session?

A big screen, monitor or projector if possible (if possible touch screen)

3 x Android Tablets for example Nvidia Shield/ Samsung Galaxy Tab or any other high-performance device (if possible - we will have 3 devices with us)

Video audio recorder