

Digital Solutions for Circular Economy and Transforming Industry



Ministry of Innovation, Science
and Research of the German State
of North Rhine-Westphalia



Horizon 2020 for Circular Economy and Transforming Industry

9 October 2019 | Warsaw, Poland



Digital Solutions in Research & Innovation Projects / Development of software and application management

- Nuromedia Gmbh and Nurogames GmbH are 2 sister companies (SMEs) based in Cologne
- We work in in ICT projects, gaming and software development with **more than 20 years of expertise in European and national R&D projects**, reflecting the strategic pillar of the commercial projects for clients of different sectors and the development of own commercial projects





More than 20 years of expertise in digital solutions and in EU-funded research, development and innovation projects

EU framework programs FP 5, FP 6, FP 7, H2020



Ministry of Innovation, Science and Research of the German State of North Rhine-Westphalia



Federal Ministry of Education and Research



Examples of our Clients & Partners



			
			
			
			
			

18 actual research & innovation projects – from Digital Health, 5G or Digital Twins to Energy, Smart Cities and Circular Economy



Core Expertise

Software Development

- Software Engineering
- Requirements Analysis
- Software Architecture,
- System Design
- Client & Server Development for VR/AR, Mobile, Web/Browser, PC & Console

UI/UX, 2D & 3D Design & Animation

- Application Design, Game Design
- GUI Design, User Experience / Interface Design
- Character Design,
- 2D / 3D Graphics, Modelling, Animation,
- Motion Capturing

Business Development

- Business Planning & Modelling
- Impact Management
- Dissemination & Public Relations
- Exploitation,

Research & Innovation Topics & Interests

Digital Twin for Smart Factories, Buildings, Cities, Construction, Farming, Mobility, Energy

- Construction Industry, IoT / Internet of Things / Smart Cyber-Physical Systems, Real-Time Data, BIM
- Industry 4.0, Factories of the Future, Digital Automation, Energy Efficiency

Digital Health Technologies, Personalised Medicine, Health Care & Lifestyle

- Health Applications, Games, ICT, Big Data, Analytics
- ICT Solutions for Active Ageing & Self-Management of Health

ICT, Software Technologies, Software Engineering, Future Internet & 5G

- Software Design, Development & Testing, Programming & Modelling Methods
- Automated Deployment, Dynamic Configuration, Performance Monitoring
- Context-aware & Self-adaptive Software, FIWARE & Smart Applications
- Distributed Ledger & Blockchain Technologies

Big Data, Cloud Computing, Cloud Technologies, Advanced

- Privacy-Preserving Big Data Technologies, Scalable Architectures
- Visualisation & Administration Tools, Tracking, Monitoring, Analytics, Reporting

Artificial Intelligence & Machine Learning

- Deep Learning, Machine Learning, Predictive Modelling, Analytics & Maintenance
- AI for Manufacturing, Health, Big Data

Avatar Technologies, Multi-Modal Interfaces & Interactive Technologies

- Verbal & Non-Verbal Communication Technologies, Chat Bots, Language Processing
- Sign Language Processing, Gesture Recognition & Generation

VR / AR / MR, User Interfaces, UI / UX Design & Development

- Virtual, Augmented & Mixed Reality Applications, VR/AR Games
- Virtual Meeting Rooms, Online Collaboration,

Digital Education, Learning & Teaching Technologies

- Game-Based Learning, Learning Analytics, Technology Enhanced Learning
- Interactive Learning Applications in VR/AR Environments

Digital Gaming & Gamification Technologies

- Serious & Applied Games, Gamification Solutions, Gaming Analytics
- Mobile, Web/Browser, PC, Console, VR/AR & Online Games



Nuromedia & Nurogames in the field of Circular Economies & Transforming Industries



PTwist is an open platform for plastic lifecycle awareness, monetization and sustainable innovation

PTwist will **define an ecosystem** around its innovative platform by **utilizing ICT technologies** to **incentivize, educate, engage** and **sustain** communities and innovators under a **novel circular plastics economy paradigm**

Partnership scheme: 9 partner, 7 countries

Expertise in ICT, social good, communities, makers, inventors & innovators



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 780121



DigitalTwin build vertical digital twins for the optimization in the design implementation and maintenance phase, as well as and (predictive) analysis



Digital Twin for Smart Cities

Cityware is a digital twin of your city to monitor the infrastructure on real-time, simulate the real situation in the virtual world. Completely under GDPR regulation with no video streaming



Digital Twin of Tunnel Construction

Tunnelware is a VaaS (Virtuality as a Service) for tunnel construction industry to manage the construction process while managing the data generated by various sensors and human interaction.





Jens Piesk

Founder & CEO

jens.piesk@proj.nuromedia.com

mobile: +49 1512 3456 926

Dr. Holger Sprengel

Founder & Chairman

holger.sprengel@proj.nurogames.com

mobile: +49 178 350 1024

Andrew Pomazanskyi

Project Manager

andrew.pomazanskyi@proj.nurogames.com

mobile: +49 176 1398 8011

Dr. Philip Mildner

Project Manager & Software Developer

philip.mildner@proj.nurogames.com

mobile: +49 176 1398 8033

- Need our expertise and long term experience?
- Want to brainstorm a project idea?
- Working on a proposal and need a German SME with our expertise to join your consortium?

Contact us!

Nuromedia GmbH

Schaafenstr. 25

50676 Köln

www.nuromedia.com

+49 221 398808 00

Find more info in our [brochure](#):



www.nurogames.com/research/

Nurogames GmbH

Schaafenstr. 25

50676 Köln

www.nurogames.com

+49 221 398808 40

NUROMEDIA



NUROGAMES

Jens Piesk

Founder & CEO

jens.piesk@proj.nuromedia.com

mobile: +49 1512 3456 926

Dr. Holger Sprengel

Founder & Chairman

holger.sprengel@proj.nurogames.com

mobile: +49 178 350 1024

Andrew Pomazanskyi

Project Manager

andrew.pomazanskyi@proj.nurogames.com

mobile: +49 176 1398 8011

Dr. Philip Mildner

Project Manager & Software Developer

philip.mildner@proj.nurogames.com

mobile: +49 176 1398 8033

Backup Slides

Nuromedia GmbH

Schaafenstr. 25

50676 Köln

www.nuromedia.com

+49 221 398808 00

Find more
info in our
[brochure](#):



www.nurogames.com/research/

Nurogames GmbH

Schaafenstr. 25

50676 Köln

www.nurogames.com

+49 221 398808 40

Overview



Applications, Systems & Solutions

- Web-Development & Online Platforms
- User Interface Applications
 - VR & AR Applications in Unity
- Digital Twin Systems
 - IoT Platforms
 - Smart City Solutions
- Smart Home Solutions
-



Potential Partners

- Research Institutes
- Universities
- Industry

Sectors

- Health
- Education
- Manufacturing

Thank you for your attention!

Nurogames GmbH / Nuromedia GmbH
Schaafenstr. 25, 50676 Cologne, Germany
www.nurogames.com / www.nuromedia.com

Jens Piesk, Managing Director & Founder
jens.piesk@mgt.nurogames.com
iPhone/WhatsApp: +49 1512 3456 926
Skype: jens.piesk

Our Core Expertise

- **Software & Application Development Development, Software Engineering**
- **UI/UX 2D & 3D Design & Animation**
- **Business Development, Impact Management, Exploitation**



Research & Innovation Competences & Interests

- Digital Health Technologies, Personalised Medicine, Health Care & Lifestyle
- ICT, Software Technologies, Software Engineering, Future Internet & 5G
- Big Data, Cloud Computing, Cloud Technologies, Advanced
- Artificial Intelligence & Machine Learning
- Avatar Technologies, Multi-Modal Interfaces & Interactive Technologies
- VR / AR / MR, User Interfaces, UI / UX Design & Development
- Digital Twin for Smart Factories, Buildings, Cities, Construction, Farming, Mobility, Energy
- Digital Education, Learning & Teaching Technologies
- Digital Gaming & Gamification Technologies

