Are you looking for a PhD Position in the field of Augmented and Virtual Reality? Is excellent research your passion? Do you like to work in a multi-cultural research-oriented environment? If so, we would like to meet you!

Researcher – PhD Candidate in the field of Biomedical Engineering (w/m/d)

Full-time (38,5h/W), Graz

Tasks:

A growing volume of data increasingly demands the ability to access data anytime and anywhere, to be digested, often by drawing from a collective expertise before making a decision. This raises two fundamental challenges: First, current analytics tools can only offer a peephole view into the data and are not suited for situational sense-making tasks. Second, geographic separation frequently makes it infeasible for all stakeholders involved to physically participate in the tasks analysis. **We are searching for a PhD Candidate to join a research team of 6 people working on "Data Driven Immersive Analytics". We will apply techniques of multimodal physiological monitoring and decoding to extend human performance in immersive environments.**
This project runs for 4 years. It counts the support of scientific collaborator TUG INE and will be jointly supervised by Prof. Gernot Müller-Putz and Prof. Eduardo Veas.

We are currently searching for a PhD candidate in the area of Biomedical Engineering. As part of our team, you will investigate methods to gather physiological signals and quantify diverse human factors of users working in immersive environments. You will be part of an interdisciplinary team working in areas of immersive visualization, digital twin data, embodied interaction, wearable displays, wearable sensors, machine learning, user experience and perceptual psychology.

Within our research team, you will investigate methods for multimodal physiological monitoring and decoding of aspects related to performance in immersive environments. To do so, you will apply a psychophysiological research approach aiming to elicit measurable effects in controlled experiments, you will design and study machine learning methods for automatic psychophysiological state decoding and deploy them to complement interaction in immersive environments.

You will investigate and design techniques and methods using modern wearable sensing technology, including eye-tracking, heart-rate, galvanic skin response, electroencephalogram (EEG), electromyography (EMG), among others., and research novel algorithms to extend our understanding of human performance with immersive technology. This is your chance to make the work of fiction a reality of the future!

Qualifications:

- Master's Degree in Biomedical Engineering, Computer or Information Science, or similar discipline
- Solid background in one of the following areas and willingness to work on the others: EEG and other biosignals, eye tracking, biosignal processing, statistical analysis, experimental design
- Technical understanding of and interest in immersive analytics and digital twins
- Ability to work independently, think out of the box, thrive in dynamic fast-paced environments
- Ability to work as part of a team, offer advice and receive feedback
- Excellent communication skills in English (knowledge of German is of advantage)

We offer:

- A unique opportunity for a financed research group
- Very good work-life balance (flexible working hours)
- Dynamic, creative and multi-cultural team and informal and stimulating working atmosphere

Under our collective agreement, the minimum gross salary for this full-time (38.5 h/W) position is € 2,971,50 per month (14 times a year). Higher compensation is possible, depending on your qualifications and experience. We are looking forward to your application at career@know-center.at.

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Researcher – PhD Candidate in the field of Immersive Analytics Embodied Interaction (w/m/d)

Full-time (38,5h/W), Graz

Tasks:

Digitalization efforts have led to massive sensor infrastructures embedded in the fabric of objects, processes and space. A growing volume of data increasingly demands the ability to access data anytime and anywhere, to be digested, often by drawing from a collective expertise before making a decision. This raises two fundamental challenges: First, current analytics tools can only offer a peephole view into the data and are not suited for situational sense-making tasks. Second, geographic separation frequently makes it infeasible for all stakeholders involved to physically participate in the tasks analysis. **We are searching for a PhD Candidate – Researcher – to join a research team of 6 people working on "Data Driven Immersive Analytics". We will apply immersive analytics, using virtual reality and augmented reality to deliver first person analytics of digital-twins in industrial applications regardless of location.**

The project is centered in the Area Knowledge Visualization and will be supervised by Univ.-Prof. Eduardo Veas.

We are currently searching for a PhD candidate in the area of Immersive Analytics. As part of our team, you will investigate methods for embodied interaction with visual augmentations that re-define how people interact with the digital world. You will be part of an interdisciplinary team working in areas of immersive visualization, digital twin data, embodied interaction, wearable displays, wearable sensors, machine learning, user experience and perceptual psychology.

Within our research team, you will explore, prototype and experiment with the concept of embodiment using wearable augmented displays and augmented visualizations to enhance human perception towards the digital world. The goal is to reach a degree where interacting with immersive data visualizations feel as an extension of the human natural interaction in space. You will design the experience using novel wearable technology, and investigate the implications it has in the users' understanding of the data, the real-world and the entities therein.

This is your chance to make the work of fiction a reality of the future.

Qualifications:

- Master's degree in Computer or Information Science, or similar discipline
- Solid background in one of the following areas and willingness to work on the others: Virtual/Augmented reality, Visual analytics, Computer Graphics, Visualization, Unity programming, Python
- Technical understanding of and interest in immersive analytics and digital twins
- Ability to work independently, think out of the box, thrive in dynamic fast-paced environments
- Ability to work as part of a team, offer advice and receive feedback
- Excellent communication skills in English (knowledge of German is of advantage)

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Researcher – PhD Candidate in the field of Immersive Visualization (w/m/d)

Full-time (38,5h/W), Graz

Tasks:

Digitalization efforts have led to massive sensor infrastructures embedded in the fabric of objects, processes and space. A growing volume of data increasingly demands the ability to access data anytime and anywhere, to be digested, often by drawing from a collective expertise before making a decision. This raises two fundamental challenges: First, current analytics tools can only offer a peephole view into the data and are not suited for situational sense-making tasks. Second, geographic separation frequently makes it infeasible for all stakeholders involved to physically participate in the tasks analysis.

We are searching for a PhD Candidate – Researcher – to join a research team of 6 people working on "Data Driven Immersive Analytics". We will apply immersive analytics, using virtual reality and augmented reality to deliver first person analytics of digital twins in industrial applications regardless of location.

The project is centered in the Area Knowledge Visualization and will be supervised by Univ.-Prof. Eduardo Veas.

We are currently searching for a PhD candidate in the area of Immersive Analytics. As part of our team, you will investigate novel 3D data visualizations and analytics methods that re-define how people interact with the digital world. You will be part of an interdisciplinary team working in areas of immersive visualization, digital twin data, embodied interaction, wearable displays, wearable sensors, machine learning, user experience and perceptual psychology.

Within our research team, you will explore, prototype and experiment with immersive displays, computer graphics, and visualizations to achieve a coherent representation of abstract data from a digital twin within the real world. You will design the experience using novel wearable technology and investigate the implications it has in the users' understanding of the digital twin.

This is your chance to make the work of fiction a reality of the future.

Qualifications

- Master's degree in Computer or Information Science, or similar discipline
- Solid background in one of the following areas and willingness to work on the others: Virtual/Augmented reality, Visual analytics, Computer Graphics, Visualization, Unity programming, Python
- Technical understanding of and interest in immersive analytics and digital twins
- Ability to work independently, think out of the box, thrive in dynamic fast-paced environments
- Ability to work as part of a team, offer advice and receive feedback
- Excellent communication skills in English (knowledge of German is of advantage)

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Are you looking for a PhD Position in the field of Augmented and Virtual Reality? Is excellent research your passion? Do you like to work in a multi-cultural research-oriented environment? If so, we are happy to meet you!

Researcher – PhD Candidate in the field of Computer Vision and Robotics (w/m/d)

Full-time (38,5h/W), Graz

Tasks:

Digitalization efforts have led to massive sensor infrastructures embedded in the fabric of objects, processes and space. A growing volume of data increasingly demands the ability to access data anytime and anywhere, to be digested, often by drawing from a collective expertise before making a decision. This raises two fundamental challenges: First, current analytics tools can only offer a peephole view into the data and are not suited for situational sense-making tasks. Second, geographic separation frequently makes it infeasible for all stakeholders involved to physically participate in the tasks analysis. **We are searching for a PhD Candidate – Researcher – to join a research team of 6 people working on "Data Driven Immersive Analytics". We will apply immersive analytics, using virtual reality and augmented reality to deliver first person analytics of digital twins in industrial applications regardless of location.** The project is centered in the Area Knowledge Visualization and will be supervised by Univ.-Prof. Eduardo Veas.

We are currently searching for a PhD candidate in the area of Computer Vision applied to scene reconstruction. As part of our team, you will investigate methods to capture the space environment of the physical referent with sufficient details to guarantee an immersive experience for the remote user to experience a remote augmented environment. You will be part of an interdisciplinary team working in areas of immersive visualization, digital twin data, embodied interaction, wearable displays, wearable sensors, machine learning, user experience and perceptual psychology.

Within our research team, you will investigate the methods needed to offer an interactive first person viewpoint on a remote scene, as well as techniques to extend the natural interaction in space to the remote location, either leveraging remote mobile viewpoints, cameras located in the environment or other sensing methods. The goal is to extend the capabilities of a remote user to interact with the augmented space as if locally there. You will investigate and design techniques and methods using modern sensing technology, and research novel techniques to extend the human capability to interact in remote locations as if present.

This is your chance to make the work of fiction a reality of the future.

Qualifications

- Master's degree in Computer or Information Science, or similar discipline
- Solid background in one of the following areas and willingness to work on the others: Computer Vision, Scene reconstruction, Robotics Virtual/Augmented reality, Computer Graphics, Python
- Technical understanding of and interest in immersive analytics and digital twins
- Ability to work independently, think out of the box, thrive in dynamic fast-paced environments
- Ability to work as part of a team, offer advice and receive feedback
- Excellent communication skills in English (knowledge of German is of advantage)

We offer

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- Very good work-life balance (flexible working hours)
- Dynamic, creative and multi-cultural team and informal and stimulating working atmosphere

Under our collective agreement, the minimum gross salary for this full-time (38.5 h/W) position is € 2,971,50 per month (14 times a year). Higher compensation is possible, depending on your qualifications and experience.

We are looking forward to your application at career@know-center.at.

Are you looking for a Postdoc Position in the field of Augmented and Virtual Reality? Is excellent research your passion? Do you like to work in a multi-cultural, research-oriented environment? If so, we would like to meet you!

Senior Researcher - Postdoc in the field of Immersive Visualization (w/m/d)

Full-time (38,5h/W), Graz

Tasks:

Digitalization efforts have led to massive sensor infrastructures embedded in the fabric of objects, processes and space. A growing volume of data increasingly demands the ability to access data anytime and anywhere, to be digested, often by drawing from a collective expertise before making a decision. This raises two fundamental challenges: First, current analytics tools can only offer a peephole view into the data and are not suited for situational sense-making tasks. Second, geographic separation frequently makes it infeasible for all stakeholders involved to physically participate in the tasks analysis. **We are searching for a Postdoc – Senior Researcher – to lead a four year project on the topic of "Data Driven Immersive Analytics" with 6 PHDs. We will apply immersive analytics, using virtual reality and augmented reality to deliver first person analytics of digital-twins in industrial applications regardless of location.**

The project is centered in the Area Knowledge Visualization and will be supervised by Univ.-Prof. Eduardo Veas.

We are searching for an ambitious researcher, enthusiastic about achieving high level of scholarship in the concerned areas of expertise. Ideally, the candidate is a communicative person able to manage networking, and eager to take the lead of a consortium with excellent research associates:

- Managing and supporting 6 PHDs in the next 4 years
- Clarifying research goals, setting targets and pushing publications
- Monitoring of the project processes and reporting
- Developing additional future project goals and adhering to them
- Acting as an interface between internal staff, external counterparts and customers
- Identifying new research opportunities and funding possibilities

Qualifications:

- PhD in Computer or Information Science, or similar discipline
- International research profile in at least one of these areas: Virtual/Augmented reality, Visual analytics, Computer Graphics, Computer Vision, Biomedical Engineering
- Good organizational skills, excellent communication skills and teamwork
- Technical understanding of and interest in immersive analytics and digital twins
- Experience in leading scientific projects of advantage
- Experience in the acquisition of research projects (national and international) and industrial projects of advantage
- Knowledge of project management methods
- Fluent English (knowledge of German is of advantage)

We offer:

- A unique opportunity to boost your academic career with a financed research group
- Very good work-life balance (flexible working hours)
- Working at the interface between business and science
- Dynamic, creative and multi-cultural team and informal and stimulating working atmosphere

We are required by law to specify the minimum gross salary according to the collective agreement, which is 3,730,- Euros per month (14 times a year). However, depending on qualifications and professional experience, we are happy to pay a salary in line with the market, which may also be above the minimum gross salary specified in the collective agreement. We are looking forward to your application at career@know-center.at.