VIRTUAL AND AUGMENTED REALITY FOR DIGITAL MEDICINE

HANDS ON INTRODUCTION TO SHAPING THE FUTURE OF DIGITAL MEDICINE

Virtual Reality (VR) and Augmented Reality (AR) are becoming more and more part of doctors' everyday lifes.
But how do these applications work, and how are they made?

This minor aims at giving the students an understanding of VR/AR applications, their use, how they are developed and why they are increasingly popular in training and everyday lives of doctors as well as other medical staff.
The minor builds a link between theoretical foundations, medical applications and own creativity.
It combines various educational formats, from lectures on basics and theory, via specific practical tasks to deepen understanding, to an extensive practical hands on lab and field course.

Contents of the minor are:
- the future of digital medicine
- VR/AR technologies
- usability and gamification
- project management
- developing medical applications

A strong offer with:
- high practical orientation
- learning and working in small groups
- renowned lecturers
- excellent and individual support

DEEPENING
ONE COURSE MINOR
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10 weeks
15 EC

Digital Medicine on the pulse of time:

Period? 31.08.2022 to 06.11.2022
Monday to Friday
from 9:00 h to 16:30 h

Place? Artur-Woll-Haus
Am Eichenhang 50
57076 Siegen, Germany

No technical skills required!

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START DATE: 31.08.2022

Artur-Woll-Haus (AE), University of Siegen

COURSE PROGRAM

WEEK	01	02	03	04	05	06	07	08	09	10
09:00 h - 12:00 h / 13:30 h - 16:30 h	AR	AR	VR	VR	PP	PP	CP	CP	CP	P+E

AUGMENTED REALITY
- Introduction to augmented reality and the future of digital medicine
- AR Technology
- State of the art examples: AR in current clinical application
- Concept development, Interfaces
- Unreal Engine
- AR Lab Project

VIRTUAL REALITY
- Introduction to Virtual Reality
- VR Technology
- State of the art examples: VR in clinical and educational medical contexts
- Concept development
- VR user experience
- Unity Engine
- VR Lab Project

PROJECT PREPARATION
- Advanced programming: Do's and Don'ts of software development
- Project management
- Concept Design of an own Medical VR/AR Application
- Skills Lab

CREATIVE HANDS-ON PROJECT
- Concept and Development of an own Application
- Self-management in a small design team
- Weekly Design Reviews with the supervisors

PRESENTATION AND EXAMINATION
- Presentation of the Hands-On Project results with live demonstration
- Written report + Exam
- Feedback sessions

Join us shaping the future of digital medicine!

Hard to believe!
- INTERNATIONAL MINOR (in ENGLISH)
- FREE ticket for public transport in Siegen for this time possible
- This course is FREE

CONTACT

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