Q4/2024
ICCAS NEWSLETTER

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Dear Reader,

we are pleased to present you the latest newsletter of ICCAS for Q4 2024.

Various conferences, events and presentations attended are briefly presented, as are new publications and personel achievements. We hope you enjoy reading our update and find interesting information.

Andreas Melzer & Thomas Neumuth

#TECHNOLOGIES_AND_SCIENCE_PRESENTATION

- ICCAS @ Tage der Digitalen technologie
- ICCAS @ Digitalgipfel Hessen
- ICCAS @ DHC24
- ICCAS @ Forum Digital Tech
- ICCAS @ XPomet
- ICCAS @ ASH

#PROJECT_WORK

- Consortium meeting of the Open5G-paceMaker project at ICCAS Leipzig

#TECHNOLOGIE_AND_SCIENCE_PRESENTATIONS

Presentations and Conferences in Q4

October 7th-8th, 2024 - Berlin
ICCAS @ Tage der Digitalen Technologie

This year's "Tage der Digitalen Technologie" took place on October 7th and 8th at the bcc Berlin Congress Center under the motto: "Transformation durch Innovation – nachhaltig, souverän, vernetzt". The Federal Ministry for Economic Affairs and Climate Protection (BMWK) cordially invited all those interested in digitalization, sustainability and innovation to attend.

This two-day event brought together representatives from numerous future-oriented projects. The focus was on topics such as communication and quantum computing technologies as well as smart city solutions- including Leipzig's Digital City department.

Tobias Pabst, invited on behalf of CampusOS, gave a short pitch on current developments in clinical communication technology. The increasing demand for customized and powerful IP networks is being fuelled by the spread of interoperable communication standards. However, there is currently no technology that covers all requirements. For this reason, new solutions and better coordination between telecommunications, IT and medical technology will be needed in the future.

October 21th-22th, 2024 - Frankfurt
ICCAS @ Digitalgipfel Hessen

Frankfurt hosted the German government's Digital Summit on October 21th and 22th, 2024 and offered insights into the digital future. Under the motto "Smart City Frankfurt - Discover Digital Places", citizens were able to experience digitalization - with exhibitions on smart living, digital administration and workshops on artificial intelligence and sustainability. The city presented itself as a digitally networked location and, together with Hesse, demonstrated the progress of the digital transformation.

One highlight was the "6G-Health" project funded by the Federal Ministry of Education and Research (BMBF) at the Vodafone Germany stand. Health monitoring technologies were presented in collaboration with partners such as the Vodafone Innovation Center Dresden and the German Research Center for Artificial Intelligence (DFKI). These included the wireless recording of vital parameters using radar waves, which are measured by sensors installed in the patient's bed. This so-called JCAS technology is to be used in 6G mobile networks. Another highlight was the Body Area Network developed by DFKI, which net-

works wearables in an energy-efficient way and can transmit data to hospitals- ideal for patient aftercare.

The VDE also presented the MDComp framework, which facilitates the approval of modular medical devices. Numerous representatives from politics and business, including Federal Chancellor Olaf Scholz, Daniela Kluckert and Robert Habeck, learned about the projects and set an example for the importance of digital innovations in Germany.

fltr: Clemens Möllenhoff (ICCAS),Hans Wenner (VDE), Susanne Dig (BMDV), Jan Petershans (DFKI), Gertrud Husch (BMDV), Thomas Petzhold (Vodafone), Tanja Marek (Vodafone), Max Rockstroh (ICCAS) at the exhibition stand of the 6H Health project.

November 28th, 2024 - Berlin
ICCAS @ DHC24

On November 28th, 2024, leading minds from politics, business and healthcare met at Kosmos Berlin for the Digital Health Conference 2024 (#dhc24). Under the motto "How can we make a successful transition to digital healthcare?", the focus was on pressing issues such as the shortage of skilled workers, reducing bureaucracy, the use of big data and the use of artificial intelligence.

As part of the conference, ICCAS and our employee Tobias Pabst presented the pioneering KliNet5G project, which offers innovative solutions for networked healthcare.

In addition to presenting projects such as the electronic patient record (ePA), digital health applications (DiGAs) and telemedicine, the role of data spaces such as the European Health Data Space and the regulation of AI were discussed. One thing became clear: Only through intersectoral cooperation and the courage to innovate can we successfully meet the challenges of skills shortages and demographic change.

ICCAS employee Tobias Pabst at the DHC in Berlin.

November 29th, 2024 - Berlin
ICCAS @ Forum DigitalTech

The Forum Digital Technologies (FDT) in Berlin offers a platform for the presentation and networking of innovative research projects in the field of digital future technologies. With a showroom, event spaces and customized networking events, the FDT supports projects that are funded by the Federal Ministry of Economics and Climate Protection (BMWK). A particular focus is on the transfer of research results to industry, especially to SMEs. National and international roadshows, coaching and other formats promote the transfer of results and the visibility of the projects.

Link to the official website of the BMWK: www.digitale-technologien.de

December 3rd-4th, 2024 - Leipzig
ICCAS @ XPOMET

XPOMET© Medicinale, a leading international conference for innovation and technology in healthcare, took place this year on December 3rd and 4th at the Congress Center Leipzig. Over 2,500 participants from more than 20 countries, including leading experts, doctors and decision-makers, came together to discuss and present the technologies of the future in the healthcare sector.

The diverse programme covered topics such as the future of healthcare, digitalization and artificial intelligence, genomics, robotics, diversity in medicine and sustainable healthcare systems. Dr. Stefan Drauschke, the medical director of the conference, highlighted the community-driven approach that promotes innovation and collaboration.

Andreas Melzer took part as a speaker in the session "Robotics in medicine - a 360° view of this challenge" and also spoke on the "Robots 2.0" and "Future OR" panels. He highlighted the achievements of robotics in the medical context, but also presented the current and future challenges of integrating this technology into everyday clinical practice.

November 7th-10th, 2024 - San Diego, USA
ICCAS @ ASH

The American Society of Hematology (ASH) is the world's largest professional society for clinicians and scientists dedicated to the study and control of blood disorders. Since its founding in 1958, ASH has promoted the advancement of hematology through research, patient care, education and policy advocacy. The 66th ASH Annual Meeting and Exposition will take place December 7th to 10th, 2024, in San Diego, California, and online, and is the world's most comprehensive hematology event.

The ICCAS (Innovation Center Computer Assisted Surgery) was represented at the conference with a presentation by Nora Grieb, who presented the results of a study on "Single Vs. Tandem Autologous Stem Cell Transplantation in Newly Diagnosed Multiple Myeloma". The study is based on data from the German DRST registry and shows that a second stem cell transplant (ASCT) offers advantages for patients without complete remission after induction therapy or a first transplant. On the other hand, patients with advanced disease and kidney problems achieve better results after a single transplant.

Projects and Results in Q4

October 21th-22th, 2024 - Leipzig
Consortium meeting of the Open5GpaceMaker project at ICCAS Leipzig

On October 21 and 22, 2024, the consortium meeting of the Open5GpaceMaker project took place at SIKT (Saxon Incubator for Clinical Translation) in Leipzig. Participants included representatives from Osnabrück University of Applied Sciences, Chemnitz University of Technology, airpuls GmbH, InnoRoute GmbH and Highstreet Technologies GmbH.
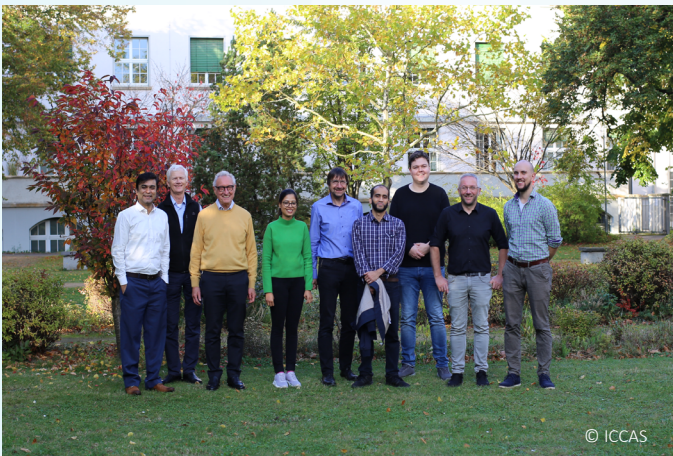
ICCAS was represented by Ivan Matyash and Stefan

Bohn.

The focus was on discussions and plans for Time Sensitive Networks (TSN) based on 5G wireless technologies. In particular, this involved the presentation and technical evaluation of the technologies developed in the project in a demonstrator at ICCAS.

In addition to the content-related work and the planning of the next project steps, ICCAS gave the project partners a tour of its premises. The demo operating room and the patient room currently under construction were presented as platforms for tests and the further development of 5G and TSN technologies.

The meeting served the purpose of technical coordination and offered insights into the practical testing possibilities at ICCAS, which are crucial for the further project steps.

fltr: Wajid Ullah Khan (Airpuls GmbH), Andreas Fogler (Inno Route), Günther Bräutigam (airpuls GmbH), Shabnam Sultana (highstreet Technologies), Ralf Tönjes (Hochschule Osnabrück), Syed Tasnimul Islam (TU Chemnitz), Felix Kahmann (Hochschule Osnabrück, Stefan Bohn (ICCAS), Ivan Matyash (ICCAS)