Staff Scientist – Visualization

The KAUST Visualization Core Lab (KVL) is seeking a highly motivated and collaborative scientist with a strong background in HPC visualization design and support. KVL advances the KAUST mission by providing cutting-edge visualization and data science services; collaborating with domain researchers to accelerate discoveries through large-data visualization, machine learning, and data science; and supporting the needs of KAUST and in-Kingdom entities by providing access to and training on state-of-the-art visualization hardware and software for scientific discovery.

The scientist will work in collaboration with other team members to build cutting-edge interactive scientific-visualization workflows for domain scientists and industry partners on a variety of platforms, including ultra-high resolution tiled-displays and virtual reality environments. The scientist will also design and implement HPC visualization and analysis pipelines from simulations running on supercomputing facilities at KAUST, including Shaheen (KAUST’s Cray XC40 system) and other HPC GPU-based clusters.

The successful candidate should be equally comfortable in software development, scientific visualization, HPC systems, and big data. Some knowledge of deep learning techniques and willingness to learn and explore the data science area will also be required. It is important for the candidate to keep abreast of current scientific developments in the field and he/she must be able to work under strict deadlines.

Major Responsibilities

• Provide HPC visualization and data science support to research endeavors across campus
• Maintain accurate documentation and training guidelines for software and hardware visualization tools
• Propose, evaluate, and deploy new technology solutions for visualization and data science workflows in collaboration with other KVL staff and users

Qualifications & Competencies

• Ph.D. in computer science or related field with demonstrated relevant expertise
• Experience in scientific and HPC visualization application design, implementation, and workflow development
• Experience with GPUs and accelerator technologies in large-scale networks
• At least two years of experience in one or more of the following areas: C, C++, MPI, OpenMP, Python, VTK, Avizo, Paraview, ilastik, VisIt, etc.; as well as proficiency with basic libraries for machine learning
• Excellent oral and written communication in English

e-mail: jysoo.lee@kaust.edu.sa & anton.oltar@kaust.edu.sa

About King Abdullah University of Science and Technology

Founded in 2009, King Abdullah University of Science and Technology (KAUST) is a top-ranking graduate research university located on the shores of the Red Sea in Saudi Arabia. The University is dedicated to solving global challenges in the areas of food, water, energy, the environment, health and digital.

KAUST employees enjoy exceptional packages, including competitive salaries and relocation allowances, fully furnished on-campus accommodation, and comprehensive health insurance coverage. KAUST also provides international schools (IB program) and a wide variety of recreation facilities.

The Core Labs at KAUST is a shared research facility comprised of 12 laboratories run by over 240 staff. Its mandate is to promote the scientific ambitions of KAUST and Saudi Arabia by stewarding and developing state-of-the-art facilities and technical expertise and delivering research support, training, collaboration and services to KAUST faculty, students, researchers and partners.