

Visualization Core Lab

Data Scientist

The KAUST Visualization Core Lab (KVL) is seeking a highly motivated data scientist that will work in collaboration with other visualization team members to build cutting-edge interactive data science pipelines and visualization workflows for domain scientists and industry partners, and architect solutions for effective exploration of large scientific datasets on a variety of platforms. The incumbent will be equally comfortable in software development, statistics, machine learning, big data, and visualization. Knowledge of information visualization techniques, visual analytics dashboard design, infographic interactive displays and information delivery best practices will be an added advantage.

As a desired competency, the incumbent will also design, implement and maintain streaming data analytics pipelines from simulations running in supercomputing facilities at KAUST, including Shaheen (KAUST's Cray XC40 system) and other HPC clusters on campus. This activity will require close collaboration with several domain scientists within KAUST, and computational scientists from the KAUST Supercomputing Core Lab to support the implementation of analytics solutions in their systems.

As part of the Core Labs, the incumbent will also provide training and support for students and researchers regarding the software and hardware facilities in the lab, participating in and organizing training seminars and workshops, as well providing student mentoring and support in collaboration with KAUST faculty, as appropriate.



- Provide data science support and expertise to research endeavors across campus.
- Working collaboratively with other laboratory staff and external vendors in the design and implementation of new systems, and upgrades to existing systems.
- Maintain accurate documentation and training guidelines for the utilization of laboratory software and hardware tools.
- Software tools and program development for analytics applications running on KVL and KSL facilities.
- Propose, evaluate and deploy new software and hardware technology solutions for data science at scale and analytics.
- Stay up-to-date on scientific developments in machine learning, statistical analysis, and visual analytics.
- Perform other tasks assigned by the Visualization Core Laboratory Director/Lead.

Qualifications & Competencies

NINE MARY WA

- PhD Degree in Computer Science or a related area (eg. Statistics) required with demonstrated relevant expertise
- Demonstrated experience in data science application design and implementation, using packages such as theano, caffe, tensorflow etc.
- Strong programming background in one or more of the following languages: Python, R, Julia, Matlab, C/C++.
- Working knowledge of one or more of the following MongoDB, CartoDB, ArcGIS, PostGIS.
- Excellent English oral and written communication skills.
- Highly competent technical documentation skills
- Proven ability to work with minimal supervision in a multi-disciplinary environment
- Experience with DeepLearning tools such as TensorFlow, CAFFE, PyTorch etc.
- Knowledge of or experience in working with Data Science software stack such as Jupyter, Scikit-Learn, Pandas etc.
- Data mining tools such as Apache Spark, RStudio etc.
- Understanding of Machine Learning techniques and Statistics.



jysoo.lee@kaust.edu.sa

brendan.phelan@kaust.edu.sa





جامعة الملك عبدالله للعلوم والتقنية King Abdullah University of

Science and Technology Learn more about KAUST: www.kaust.edu.sa Learn more about Core Labs:

Corelabs.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 developingstate-of-the-art facilities and technical expertise and delivering research support, training, collaboration and services to KAUST faculty, students, researchers and partners.