



Postdoctoral Fellow Position

Applications are sought for an open postdoctoral position in visualization of large-scale data at King Abdullah University of Science and Technology (KAUST). KAUST is an international, graduate research university dedicated to advancing science and technology through interdisciplinary research, education, and innovation. Located in Saudi Arabia, on the eastern shores of the Red Sea, KAUST offers superb research facilities, generous baseline research funding, and internationally competitive salaries, together with unmatched living conditions for individuals and families. The liberal social policy coupled with the top-quality research facilities have succeeded in attracting top international faculty, scientists, engineers, and students making KAUST the only university worldwide where fundamental goal-oriented and curiosity-driven research is employed to address the world's most pressing challenges related to water, food and energy sustainability as well as their impact on the environment.

The successful candidate will be involved in a collaborative project between established groups at KAUST with expertise in large-scale visualization led by Professor Markus Hadwiger, ocean modeling and data assimilation led by Professor Ibrahim Hoteit, and uncertainty quantification led by Professor Omar Knio. The aim of this project concerns the development and demonstration of advanced visualization techniques that would enable to systematically tackle some of the key challenges and open issues in uncertainty visualization. The project focuses on various geophysical fluid applications, and specifically aims to develop capabilities for preprocessing statistical and information theoretic quantities, and embedding uncertainty quantification capabilities into interactive visualization tools.

Qualified applicants should possess a Ph.D. in computer science, applied mathematics, or a related field, with research experience in visualization or other areas of visual computing. Applicants should be able to work on challenging research projects involving extensive software development with a minimal amount of supervision. Applicants should have multiple years of experience in writing high-performance, low-level code in C/C++ and developing GPU code using OpenGL and CUDA or OpenCL. Extensive experience with GPU shader and kernel development and debugging is a must. Additional experience with programming languages such as Python and JavaScript, libraries such as Qt, OpenCV, and D3, as well as development environments such as Visual Studio is beneficial.

The compensation package includes a competitive tax-free salary (\$65K-\$75K); housing, health care, 4 weeks annual vacation, free international schools, and annual travel allowance. To apply, please send curriculum vitae and a letter of interest with the names and contact information of at least two references to ibrahim.hoteit@kaust.edu.sa

