

# Scientific Visualization of Large-Scale Simulation Data

The Jülich Aachen Research Alliance (JARA) is a joint venture between the Forschungszentrum Jülich (FZJ) and RWTH Aachen University. A specific focus is on large-scale, high performance computing. Both sites operate significant resources, which include cutting edge HPC systems and high-end visualization hardware. Within the JARA section on high performance computing (JARA-HPC), the Cross-Sectional Group (CSG) "Immersive Visualization" performs application-driven research in virtual reality and scientific visualization. We specifically focus on the development of enabling technology for the visualization of large, complex simulation data. We are currently looking to expand our team in this field with a research assistant who will work on in-situ visualization methods.

## Your profile:

Successful candidates must have a university degree (Master or equivalent) in computer science or a related subject. A dissertation is an advantage but not a prerequisite for this job. You have specialized in scientific visualization, real-time computer graphics, and/or parallel programming. In addition, you have acquired solid software engineering skills, ideally while participating in one or more major software projects. Strong communication skills round out your skill-set.

## Your duties and responsibilities:

Jülich Aachen Research Alliance

As part of the CSG "Immersive Visualization" you will develop visualization methods and applications for a variety of data sets of different origin including, e.g., large-scale flow fields or particle physics simulations. We offer you the opportunity to work in a unique, highly interdisciplinary research environment in which you will closely collaborate with domain scientists from varying fields. As part of your work you will be given the opportunity to work in a team helping to acquire additional funding, coordinate and execute research activities, and present research results at internationally visible venues.

You will be employed by RWTH Aachen University, one of Germany's premier institutions in engineering and science, as a full-time research assistant. Depending on your experience, you will be given the opportunity to either pursue a doctoral degree in computer science or to conduct independent research in order to further sharpen your academic profile. In order to foster an interdisciplinary dialogue, we expect you to spend part of your regular work on-site with domain scientists at institutes of both RWTH and the FZJ.

## Our offer:

This full-time position is for a fixed term of 2 years and to be filled as soon as possible.

The salary corresponds to level TV-L.

RWTH Aachen University is certified as a "Family-Friendly University". We particularly welcome and encourage applications from women, disabled persons and ethnic minority groups, recognizing they are underrepresented across RWTH Aachen University. The principles of fair and open competition apply and appointments will be made on merit.

## Your contact person:

For further details, please visit our website (http://www.jara.org/jara-hpc) or contact Michaela Bleuel, General Manager JARA-HPC, hpc@jara.org or Dr. Bernd Hentschel, Head CSG "Immersive Visualization", hentschel@vr.rwth-aachen.de

## Please send your application by February 20, 2016 to

Dipl.-Oec. Michaela Bleuel JARA-HPC, RWTH Aachen University Schinkelstraße 2 52062 Aachen

You can also send your application via email to hpc@jara.org. Please note, however, that communication via unencrypted e-mail poses a threat to confidentiality as it is potentially vulnerable to unauthorized access by third parties.

Jülich Aachen Research Alliance – High Performance Computing (JARA-HPC) RWTH Aachen University | Schinkelstraße 2 | D - 52062 Aachen

