Matthew B. de Stadler

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Experience

Postdoctoral Research Associate, Mechanics Department   09/2013-09/2014
  Royal Institute of Technology (KTH), Stockholm, Sweden
   - Coordination of R&D projects in the areas of fluid dynamics and applied aerodynamics
   - Project planning and writing of technical proposals (awarded 1.1 million CPU hours from PRACE)

Research Associate, Mechanical and Aerospace Engineering Department   09/2007-09/2013
  University of California San Diego, La Jolla, CA
   - Coordination and execution of R&D projects in the areas of fluid dynamics, environmental
     engineering and naval hydrodynamics
   - Performed large-scale CFD computations using thousands of cores
   - Published articles in top journals and presented research findings to audiences ranging from top
     international conferences to local teenage students
   - Designed and executed test suite for verification and validation of scientific software
   - Supervised and mentored junior PhD students in my research group

Gordon Scholar, Jacobs School of Engineering   09/2010-09/2013
  University of California San Diego, La Jolla, CA
   - Participated in engineering leadership development program including courses, workshops, forums
     and hands-on activities to develop leadership and communication skills

Science & Engineering Technical Scholar, Institute for Scientific Computing Research   Summer 2007
  Lawrence Livermore National Laboratory, Livermore, CA
   - Developed a numerical simulation for fluid flow in a gas centrifuge

Research Associate, Mechanical and Aerospace Engineering Department   02/2005-05/2007
  University of Virginia, Charlottesville, VA
   - Investigated optimal geometries for a heat sink using CFD

Education

Ph.D. Engineering Sciences (Mechanical Engineering), University of California San Diego   2013
M.S. Engineering Sciences (Mechanical Engineering), University of California San Diego   2009
B.S.   Aerospace Engineering, University of Virginia. With highest distinction.   2007

Skills and Competencies

Technical Fluid mechanics, heat transfer, turbulence, computational fluid dynamics, scientific computing
expertise: numerical methods, modeling and simulation, verification and validation, software
               development, parallel computing, proposal writing, project management

Programs: Fortran, C, C++, Matlab, Python, Visual Basic, MPI, Linux, bash, Subversion, XMgrace,
               Tecplot, Latex, HTML, CSS, SolidWorks, Fluent, Star-CD, OpenFOAM, COMSOL

Languages: Swedish (Intermediate), French (Intermediate)