

ADARSH KRISHNAMURTHY

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CURRENT POSITION

Post-Doctoral Researcher

Department of Bioengineering, University of California, San Diego

EDUCATION

Year	Institution	Course	GPA	Remarks
2005-2010	University of California, Berkeley	<i>Ph.D.</i> Department : Mechanical Engineering Major : Manufacturing Minor : Computer Science	Overall : 4.00	
2000-2005	Indian Institute of Technology, Madras, India	<i>M.Tech. and B.Tech. (5 year Dual Degree)</i> Department : Mechanical Engineering Major : Product Design Minor : Theoretical Computer Science	Overall : 9.34 Major : 9.54 Minor : 9.50	Ranked first in the department (Dual degree)

ACADEMIC HONORS

- **Best paper** and **best poster** awards at the 2007 and 2008 ACM Symposium on Solid and Physical Modeling
- Awarded the **outstanding GSI award** for teaching the course, "Precision Manufacturing" (ME220), fall 2008, UC Berkeley
- Recipient of the Berkeley Graduate Fellowship, 2005-2007 (Full tuition, fees, and research stipend)
- Awarded the Prof. GVN Rayudu Memorial Prize for the student with the best academic record in Mechanical Engineering Dual Degree program, 2000-2005, IIT-Madras, India

RESEARCH INTERESTS

Bio-mechanics Simulations	High Performance Computing (HPC)
Finite Element Analysis	Parallel and GPU Computing
Computer-Aided Design (CAD)	Computer Graphics
Environmentally Conscious Design	Non-Destructive Testing and Applications

SELECTED PUBLICATIONS

- Adarsh Krishnamurthy, Sara McMains, "Accurate Moment Computation Using the GPU," *Proceedings of the ACM Symposium of Solid and Physical Modeling*, 2010.
- Adarsh Krishnamurthy, Sara McMains, Kirk Haller, "GPU Accelerated Minimum Distance and Clearance Queries," *IEEE Transactions on Visualization and Computer Graphics*, 2010 (**Invited Paper, Accepted**).
- Adarsh Krishnamurthy, Rahul Khardekar, Sara McMains, "Optimized GPU Evaluation of Arbitrary Degree NURBS Curves and Surfaces," *Computer-Aided Design*, Vol. 41, pp. 971-980, 2009.
- Adarsh Krishnamurthy, Rahul Khardekar, Sara McMains, Kirk Haller, Gershon Elber, "Performing Efficient NURBS Modeling Operations on the GPU," *IEEE Transactions on Visualization and Computer Graphics*, Vol. 15, No. 4, pp. 530-543, 2009 (**Invited Paper**).
- Adarsh Krishnamurthy, Wei Li, Sara McMains, "Simulation and Optimization of the Water-Jet Cleaning Process," *Proceedings of the ASME Design Engineering Technical Conferences, Design Automation Conference*, 2009.
- Adarsh Krishnamurthy, Rahul Khardekar, Sara McMains, Kirk Haller, Gershon Elber, "Performing Efficient NURBS Modeling Operations on the GPU," *Proceedings of the ACM Symposium on Solid and Physical Modeling*, 2008 (**Award Paper**).
- Adarsh Krishnamurthy, Rahul Khardekar, Sara McMains, "Direct Evaluation of NURBS Curves and Surfaces on the GPU," *Proceedings of the ACM Symposium on Solid and Physical Modeling*, 2007 (**Award Paper**).
- Adarsh Krishnamurthy, Mohan K. Varadarajan, Soumya K., Krishnamurthy Chitti Venkata, Krishnan Balasubramaniam, "A Simulation Tool For Ultrasonic Inspection," *Journal of the Korean Society for Non Destructive Testing*, Vol. 26, No. 3, pp. 153-161, 2006.

INTERNSHIPS

- Summer Internship at **SolidWorks Corporation**, Boston (June 11 – August 17, 2007; June 5 – August 20, 2008). Worked on developing a NURBS modeling system using the GPU.
- Short Term Scholar at **Michigan State University** (May 15 – July 15, 2004). Worked in the Non Destructive Evaluation Laboratory on finite element modeling of artificial heart valves.
- Summer Internship at **GE John F. Welch Technology Center (JFWTC)**, Bangalore (May 15 – July 15, 2003). Worked in Industrial Imaging and Modeling Lab on computer simulations of ultrasonic waves.