

## Muhammad A. Awad

---

CONTACT INFORMATION	2250 Kemper Hall, Bainer Hall Drive Davis, CA 95616	530-574-3904 mawad@ucdavis.edu
EDUCATION	<b>University of California, Davis</b> , Davis, CA  Ph.D. Student, Electrical and Computer Engineering Department. 2016 to present <ul style="list-style-type: none"><li>• Advisor: Professor John D. Owens</li></ul> <b>Alexandria University</b> , Alexandria, Egypt  B.S., Naval Architecture and Marine Engineering Department, 2009 - 2013	
RESEARCH EXPERIENCE	<b>Graduate Student Researcher</b> Electrical and Computer Engineering Department, University of California, Davis Supervisor: Professor John D. Owens	September 2016 to present
TEACHING EXPERIENCE	<b>Part-Time Teaching Assistant</b> Arab Academy for Science, Technology and Maritime Transport, College of Maritime Transport and Technology Courses: Ship Design (MM543T) and Naval Architecture (MM241T).	July 2014 to October 2016
PROFESSIONAL EXPERIENCE	<b>Programming Intern</b> Activision Publishing, Redmond, WA	July 2017 to September 2017
PUBLICATIONS	<ol style="list-style-type: none"><li>1. <b>M. A. Awad</b>, S. Ashkiani, R. Johnson, M. Farach-Colton and J. D. Owens. "Engineering a High-Performance GPU B-Tree." <i>Proceedings of the 24th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming (PPoPP)</i>. February 2019.</li><li>2. S. A. Mitchell, M. S. Ebeida, <b>M. A. Awad</b>, C. Park, A. Patney, and A. Rushdi. "Spoke-Darts for High-Dimensional Blue-Noise Sampling." <i>ACM Transactions on Graphics (TOG)</i>. July 2018.</li><li>3. <b>M. A. Awad</b>, A. Rushdi, M. A. Abbas, S. A. Mitchell, A. H. Mahmoud, C. L. Bajaj, M. S. Ebeida. "All-Hex Meshing of Multiple-Region Domains without Cleanup." <i>Proceedings 25th International Meshing Roundtable (IMR25)</i>. September 2016.</li><li>4. M. S. Ebeida, A. Rushdi, <b>M. A. Awad</b>, A. H. Mahmoud, D.-M. Yan, S. English, J. D. Owens, C. Bajaj, and S. A. Mitchell. "Disk Density Tuning of a Maximal Random Packing." <i>SGP 2016</i>. June 2016.</li><li>5. M. S. Ebeida, S. A. Mitchell, <b>M. A. Awad</b>, C. Park, L. P. Swiler, D. Manocha, L.-Y. Wei. "Spoke Darts for Efficient High Dimensional Blue Noise Sampling." <i>arXiv preprint arXiv:1408.1118</i>. August 2014.</li><li>6. M. S. Ebeida, S. A. Mitchell, A. Patney, A. A. Davidson, S. Tzeng, <b>M. A. Awad</b>, A. H. Mahmoud, and J. D. Owens. "Exercises in High-Dimensional Sampling: Maximal Poisson-disk Sampling and k-d Darts." In Janine Bennett, Fabien Vivodtzev, and Valerio Pascucci, editors, <i>Topological and Statistical Methods for Complex Data Tackling Large-Scale, High-Dimensional, and Multivariate Data Sets</i>, Springer. June 2014.</li></ol>	

7. M. S. Ebeida, **M. A. Awad**, X. Ge, A. H. Mahmoud, S. A. Mitchell, P. M. Knupp, and L.-Y. Wei. "Improving Spatial Coverage while Preserving Blue Noise of Point Sets." *Computer Aided Design (SIAM GD/SPM 2013)*. November 2013.
8. M. S. Ebeida, A. H. Mahmoud, **M. A. Awad**, M. A. Mohammed, S. A. Mitchell, A. Rand, and J. D. Owens. "Sifted Disks." *Computer Graphics Forum (Eurographics 2013)*, 32(2). May 2013.

TECHNICAL SKILLS • Programming: C++, QT (GUI Programming), OpenGL, CUDA C/C++ , FORTRAN.  
 • Applications: AutoCAD, Rhinoceros, Paraview, Maxsurf ship modeling and analysis package, Robot Structural analysis, LATEX, MATLAB (linear algebra), Microsoft Office, PostScript, and other common packages for Windows.  
 • Operating Systems: Microsoft Windows, and Linux

REFERENCES Professor John D. Owens (advisor)  
 Child Family Professor of Engineering and Entrepreneurship  
 Electrical and Computer Engineering Department  
 University of California, Davis E-mail: jowens@ece.ucdavis.edu

Mohamed S. Ebeida  
 Senior Member of Technical Staff  
 Center for Computing Research  
 Sandia National Laboratories E-mail: msebeid@sandia.gov