

## Vincent C. Betro

### Education

PhD, Computational Engineering, University of Tennessee at Chattanooga, 2010  
MS, Computational Engineering, University of Tennessee at Chattanooga, 2007  
BS, Secondary Mathematics, University of Tennessee at Chattanooga, 2002

### Employment

*STEM Outreach Coordinator/Research Associate*, SimCenter: National Center for Computational Engineering, University of Tennessee at Chattanooga, 2009 to present.  
*Graduate Research Assistant*, SimCenter: National Center for Computational Engineering, University of Tennessee at Chattanooga, 2005-2010.  
*Mathematics Instructor*, University of Tennessee at Chattanooga, 2005-2009  
*Advanced Algebra and Foundations II Instructor*, Meigs County High School, 2004-2005  
*Algebra and Foundations II Instructor*, Ooltewah Middle School, 2003-2004

### Honors and Activities

Outstanding Graduate Student Award, GSA and Department of Computational Engineering, 2008 and 2009  
Sigma Xi Scientific Research Society Research Award, 2008  
The National Scholars Honor Society, Pro Bono Lifetime Member  
Pi Mu Epsilon, Mathematics Honor Society  
Kappa Delta Pi, Education Honor Society  
John W. Jayne Mathematics Award (UTC), outstanding sophomore mathematician  
Massey Memorial Mathematics Award (UTC), outstanding male mathematician  
James G. Ware Mathematics Education Award (UTC), outstanding math instructor  
Student Government Association Outstanding Senior Award  
National Merit, Chancellor's, University of Tennessee Alumni Association, United States Achievement Academy, Robert C. Byrd Scholarships  
Dean's List, all eight undergraduate semesters at UTC  
United States Achievement Academy All-American Scholar  
Technical Writer on Library Instruction handouts, 2002  
Writer/Programmer for NSF-Sponsored Mathclass.org, 2002-2007  
Mathematics Lab Tutor, 1999-2001

### Professional Memberships

American Mathematical Society  
Society of Industrial and Applied Mathematics  
American Institute of Aeronautics and Astronautics

## **Publications**

Betro, V and Karman, S. "Fully Anisotropic Split-Tree Adaptive Refinement Mesh Generation Using Tetrahedral Mesh Stitching," Proceedings of the 49th Annual AIAA Aerospace Sciences Meeting, Orlando, FL, January 4-7, 2011. AIAA-2011-0895.

Betro, V., "Implementing a Node-Based Split-Tree Neighbor Search Algorithm," Research Note, 19th Annual International Meshing Roundtable, Chattanooga, TN, October 6-8, 2010.

Betro, V. C., "Fully Anisotropic Split-Tree Adaptive Refinement Mesh Generation Using Tetrahedral Mesh Stitching," PhD Dissertation, University of Tennessee at Chattanooga, August 2010.

Karman, S. L. and Betro, V., "Parallel Hierarchical Unstructured Mesh Generation with General Cutting," AIAA-2008-0918, Reno, NV, Jan. 2008.

Wilson, R., Nichols, S., Mitchell, B., Karman, S., Betro, V., Hyams, D., Sreenivas, K., Taylor, L., Briley, R., and Whitfield D., "Simulation of a Surface Combatant with Dynamic Ship Maneuvers," 9th Int. Conf. in Num. Ship Hydro., University of Michigan, 5-8 Aug. 2007.

McAllister, D. A., Mealer, A., Moyer, P. S., McDonald, S. A., & Peoples, J. B. (2003). Chattanooga math trail: Community mathematics modules, volume 1. Washington, DC: U.S. Copyright Office. (ERIC Document Reproduction Service No. ED478915).