Theses Directed

1. Jerome O. Igwe, May 1982, M. S. in Mathematics

   Finite Element Approximation of a Nonlinear Integro-Differential Equation.

2. Shenn-Chuh Lee, December 1982, M. S. in Mathematics

   Hybrid Methods for a Special Class of Second Order Differential Equations.

3. Hsiao-Hua Sung, May 1985, M. S. in Mathematics

   Matrix Iterative Methods.

4. Bruce G. Shapiro, June 1987, M. S. in Applied Mathematics and Meteorology (Professor R. T. Williams, Co-Advisor)

   A Study of Finite Difference and Finite Element Vertical Discretization Schemes for Baroclinic Prediction Equations.

5. Yoram Ilan-Lipowsky, June 1987, M. S. in Applied Mathematics and Aeronautical Engineering (Professor M. Platzer, Co-Advisor)

   Mathematical Models for the S. D. I.

6. Alvin D. Sears, September 1987, M. S. in Operations Research

   Detection Simulation Model of a Multisatellite Constellation Searching for TACAMO Aircraft

7. Donn E. Sloniker, June 1988, M. S. in Applied Mathematics and Meteorology (Professor R. T. Williams, Co-Advisor)

   An Investigation of Finite Difference and Finite Element Vertical Schemes for the Baroclinic Prediction Equations.

8. Vincent J. Van Joolen, June 1991, M. S. in Applied Mathematics

   Calculation of Chip Temperature Using Ellpack

9. Warren Phipps, June 1992, M. S. in Applied Mathematics (Professor D. A. Danielson, Co-Advisor)

   Parallelization of PPT2, the Propagator used by NAVSPASUR

10. Dennis Polaski, June 1993, M.S. in Applied Mathematics (Professor D. Canright, Co-Advisor)

    Use of Computers in the Instruction of Integral Calculus

11. Ed Kleinschmidt and Don Cersovski, June 1993, M. S. in Applied Mathematics (Professor B. Mansager, Co-Advisor)

    Mathematical Model and Analysis of the Tactical Unmanned Ground Vehicle (TUG-V) Using Computer Simulation

12. Lt. Sara Ostrom, USN, March 93 M. S. in Applied Mathematics (Professor D. A. Danielson, Co-Advisor)

    Parallelization of the Air Force Space Command Satellite Model

13. Major Walter Dyar, USMC, September 1993, M. S. in Applied Mathematics (Professor D. A. Danielson, Co-Advisor)

    Comparison of Orbit Propagators in the Research and Development Goddard Trajectory Determination System (R & D GTDS)

14. Susan K. Brewer, December 1993, M. S. in Applied Mathematics (Professor D. A. Danielson, Co-Advisor)

    Air Force Space Command Satellite Orbit Predictor Using Parallel Virtual Machines

15. Leon C. Stone, December 1993, M. S. in Electrical Engineering (Professor S. B. Shukla, Co-Advisor)

    Parallel Processing of Navy Specific Applications Using a Workstation Cluster

16. Stephan P. Robey, September 1995, M.S. in Electrical Engineering, (Second Reader) (Professor J. Knorr, advisor)

    Computer Simulation of the Outboard Direction Finding System

17. Thomas A. Hamrick, June 1997, M.S. in Applied Mathematics

    Analysis of the Numerical Solution of the Shallow Water Equations

18. Christopher Boyle, June 2000, M.S. in Applied Mathematics

    Inviscid Aerodynamic Predictions of Hypersonic Elliptical Projectiles: A Comparative Study of the Effects of Stabilizing Surfaces

19. Alper Sinav, March 2002, M.S. in Computer Science and Applied Mathematics

    Analysis and Modeling of the Virtual Human Interface for the MARG Body Tracking System Using Quaternions

20. Brad G. Harris, September 2004, M.S. in Meteorology, Physical Oceanography and Applied Mathematics

    Analysis of Lateral Boundary Effects on Inner Domain of COAMPS

PhD Dissertations Supervised

1. Vincent J. Van Joolen, June 2003, PhD in Applied Mathematics

   Application of Higdon Non-Reflecting Boundary Conditions to Shallow Water Models

2. John R. Dea, September 2008, PhD in Applied Mathematics

   Application of Higdon Non-Reflecting Boundary Conditions to Linearized Euler Equations

3. Joseph M. Lindquist, June 2010, PhD in Applied Mathematics

   Unstructured High-Order Galerkin-Temporal-Boundary Methods for the Klein-Gordon Equation with Non-Reflecting Boundary Conditions

PhD Dissertations External Examiner

1. P. K. Parida, July 2007, PhD in Mathematics, Indian Institute of Technology, Kharagpur, India

   Study of Some Third Order Methods for Nonlinear Equations in Banach Spaces

2. Diyashvir Kreetee Rajiv Babajee, July 2009, PhD in Mathematics, Faculty of Science, University of Mauritius

   Analysis of Higher Order Variants of Newton's method and its Applications to Differential and Integral Nonlinear Equations

3. Rajni Sharma, December 2011, PhD in Mathematics, Department of Mathematics, East Longowal Institute of Engineering and Technology, Punjab India

   Iterative Methods for the Solution of Nonlinear Equations

4. Naila Rafiq, June 2012, PhD in Mathematics, Department of Mthematics, Bahauddin Zakariya University, Multan, Pakistan

   Numerical Solution of Non-linear Equations

5. Sanjeev Kumar, August 2012, PhD in Mathematics, Department of Mathematics, East Longowal Institute of Engineering and Technology, Punjab India

   Development and Analysis of Some New Iterative Methods for Numerical Solutions of Nonlinear Equations

National Research Council Advisor

Dr. Frank X. Giraldo

A Parallel Semi-Lagrangian Finite Element Domain Decomposition Method for the 2D Shallow Water Equations.

Professor Dan Givoli

Adaptive High-Order Finite Element Schemes for Wave Problems