

CURRICULUM VITAE

Yun Liu

School of Mathematics
University of Minnesota
206 Church Street SE
Minneapolis MN 55455

Office: 522 Vincent Hall
Phone: (o) 612-624-4143
(c) 612-703-6580
Email: liu297@umn.edu
Homepage: <http://www.math.umn.edu/~liu297/>

Research Interest

Mathematical Modeling and Numerical Analysis;
Computational Acoustics and Electromagnetics;
Computational methods in linear algebra and Scientific Computation;

Education

Sep. 2004--Present: Ph. D. student in Applied Mathematics, Department of Mathematics, University of Minnesota Twin Cities. Advisor: Professor Fernando Reitich

Sep. 2008--Present: Master student in Computer Science, University of Minnesota Twin Cities.
Advisor: Professor Daniel Boley

Sep. 2004--July 2008: Master degree in Applied Mathematics, Department of Mathematics, University of Minnesota Twin Cities. Advisor: Professor Fernando Reitich

Sep. 1999--July 2004: B.S. Department of Mathematics, University of Science and Technology of China, Hefei, China.

Major: Mathematics and Applied Math.

Graduation Thesis: Existence of Element Solution in Weak Condition

Research Experience

- Research Assistant, Department of Mathematics, University of Minnesota, 01/2007-- 05/2008
- Teaching Assistant, Department of Mathematics, University of Minnesota, 09/2004 --Present
Teaching recitations of Calculus II, IT Calculus I, II & IV, Linear Algebra and Differential

Equations.
Tutoring.

- 05/2008 The 2008 NSF-CBMS Conference on Radar Imaging at University of Arlington
- 08/2007 IMA Mathematical Modeling in Industry XI.

Worked in a group of graduate students on the problem of associating earth-orbiting objects detected by astronomical telescopes, with mentor Dr. Green Gary, The Aerospace Corporation. Clustering theories and Matlab routines were used for experiments of identifying streaks detected by a telescope.

- 06/2006-08/2006 Summer Internship in Innovation Center, Eaton Corporation.

Worked with Dr. Jae Y Lew and Professor Fadil Santosa, developed the 3-DOF mathematical model of single and two connected ships in regular sea.

ADVANCED COURSES

Mathematical Modeling and Methods of Applied Mathematics (I & II);
Numerical Analysis and Scientific Computing (I & II); Topology and Manifold (I & II);
Theory of Partial Differential Equations (I & II); Probability including Measure Theory (I & II);
Mathematical Fluid Mechanics (I & II); Theory of Evolutionary Equations;
Numerical Analysis of Differential Equations (I & II);
Computational Aspects of Matrix Theory; Introduction to Parallel Computation;
Programming Languages; Linear Algebra in Data Exploration

HONORS AND AWARDS

- Excellent Student Scholarship from 2000-2004, Department of Mathematics, University of Science and Technology of China

ADVANCED COMPUTER SKILLS

Programming Languages: C, C++, Fortran, SML

Operation Systems: Windows, Linux/Unix

Tools: Mathematica, Matlab, Latex
