

EDUCATION & HONORS

Georgia Institute of Technology

Atlanta, GA

Doctor of Philosophy in Electrical Engineering

August 2004 – present

- Cumulative GPA of 3.66/4.00
- Relevant coursework includes: Applied Electromagnetics, Introduction to Computational Electromagnetics, Microwave engineering, Complex Analysis, Radar and EM Sensing(Undergraduate), Electromagnetic Applications(Undergraduate), Frequency Synthesizers, Fundamentals of Signal Processing(Undergraduate)

Bachelor of Science in Electrical Engineering

August 2000 – August 2004

- Cumulative GPA of 3.82/4.00; graduated Spring 2004
- President's Undergraduate Research Award at Georgia Tech for Spring 2003
- Deans List in recognition of outstanding academic performance for all semesters
- Faculty Honors in acknowledgment of academic excellence for Fall 2000 and Fall 2003
- Out of state tuition waiver of ~\$5,000+ per semester awarded to out-of-state students for outstanding academic achievement, involvement in internationalizing the campus and extreme financial need for Fall 2002, Spring 2003, Fall 2003, and Spring 2004

WORK EXPERIENCE

Georgia Institute of Technology

Atlanta, GA

Master's Thesis and PhD Thesis work

August 2004 – Present

- Currently working on simulating tilted microstrip structures
- Implementation of Dey-Mitra Conformal FDTD method for Perfect Electric Conductors
- Worked on automating the DOE(Design Of Experiment) Method by combining Matlab and Mefisto
- Simulated two dimensional loaded coplanar waveguides to model meta material using MEFiSTo
- Calculated S-parameters to verify meta material behavior

Graduate Teaching Assistant

August 2004 – December 2005

- Assisted students in 'Introduction to Electromagnetics' and 'Electromagnetic Applications', and graded homeworks

Undergraduate Research Assistant, Optics and Photonics

May 2002 – Aug 2003

- Performed research for and co-authored a conference paper, 'Designing Complex Optical filters Using Photonic Crystal Microcavities'
- Studied the finite difference method, and used the finite element method to solve eigen value problems in FEMLAB
- Simulated notch filters based on the side coupling of waveguide and an array of defects inside the photonic crystal structures
- Investigated the properties of microcavities in square lattice photonic crystal square lattices. Engineered their properties by removing holes, and changing the size of surrounding holes
- Investigated the dispersion and transmission diagrams for photonic waveguides to find a structure which restricts the transmission of even and odd modes in the bandgap according to certain constraints
- Fabricated and simulated different cavities, waveguides, and fibers using FEMLAB

Undergraduate Research Assistant, Flaw detection in structures using ultrasonic signals

May 2003 – July 2002

- Ranked features extracted from ultrasonic signals based on how well they discriminate between a structure with a flaw or no flaw
- Modified a simple linear perceptron neural net to classify signals as either flaw or no flaw
- Investigated the temperature dependence of ultrasonic waves

Student Assistant, Computer Department at the Student Services Center

May 2002 – July 2002

- Implemented addition, deletion, and amendment capabilities to an online equipment reservation system using PHP
- Wrote a program in C which communicated with a database in MySQL to update mailing lists

SKILLS

Programming: C, VHDL, Matlab, Femlab, MaxPlusII, PSpice Java, PHP, SendMail

Operating Systems: Windows, Unix (RedHat Linux v8.0)

Databases: MySQL, MS Access