

# ECE 596a/696a Graduate Seminar

Fall Semester 2006

Prof. Robert Schowengerdt

ECE 402

621-2706

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class website [http://www.ece.arizona.edu/~dial/ece596A/  
ece596A.html](http://www.ece.arizona.edu/~dial/ece596A/ece596A.html)

# Requirements

- Driven by degree requirements:
  - MS: Must submit at least one refereed conference or journal paper, with an ECE faculty member as a co-author.
  - PhD: Must submit at least two refereed journal papers (not counting M.S. papers), with an ECE faculty member as a co-author.

# Requirements (cont)

- MS students: 1 unit 596A
- PhD students: 2 units 696A (2 semesters)
- all students must give one oral presentation to the class, with PowerPoint or PDF slides
  - PowerPoint available in ECE208 § 226, and all CCIT labs
  - presentation may be actual or library research, or current ECE topic

# Grading

- S - superior (attend 14-16/16 classes)
- P - pass (attend 12-13/16 classes)
- E - fail (attend <12/16 classes)
- student presentations will be scored by all students (anonymously) and results will be given to the student (confidentially) by instructor

# Content

- How to write a . . .

Automated Precise Registration of Radar and  
Optical Satellite Images

By  
Tai Duc Hong

A Thesis Submitted to the Faculty of the  
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING  
In Particular Fulfillment of the Requirements  
For the Degree of  
MASTER OF SCIENCE  
WITH A MAJOR IN ELECTRICAL ENGINEERING  
In the Graduate College  
THE UNIVERSITY OF ARIZONA

2003

Automated Precise Registration of  
Radar and Optical Satellite Images



THE UNIVERSITY OF ARIZONA

Thesis Defense by  
Tai D. Hong

May, 2003

presentation

thesis or dissertation

# IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING

A PUBLICATION OF THE IEEE GEOSCIENCE AND REMOTE SENSING SOCIETY

NOVEMBER 2003 VOLUME 41 NUMBER 11 IGRSD2 (ISSN 0196-2892)

PART I OF TWO PARTS

SPECIAL ISSUE ON ANALYSIS OF MULTITEMPORAL REMOTE SENSING IMAGES

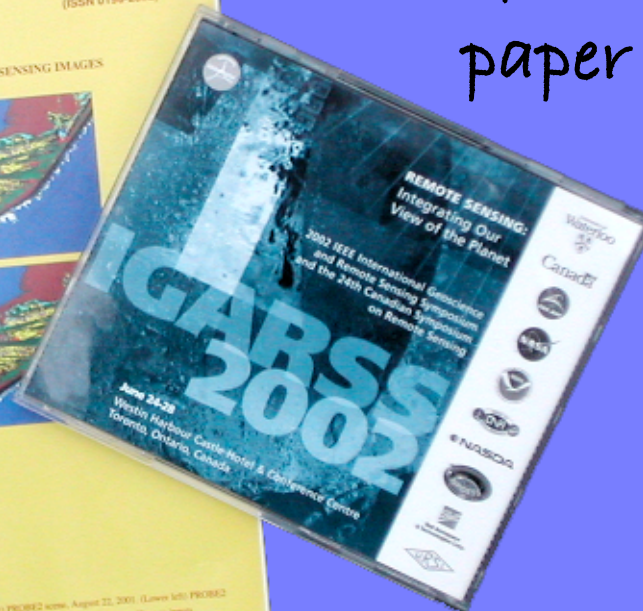


- Phragmites australis
- Sparganium angustifolium
- Zizania palustris
- Salicornia virginica
- Spartina patens
- Water
- Disturbance
- Soil
- Grass
- Deciduous forest
- Coniferous forest
- Shrubland
- Open water
- Ice/snow
- Clouds
- Urban
- Highway
- Railroad
- Other

Land-cover classification of South Island, VA. (Upper left) ISMAP scene, May 8, 2002. (Upper right) PROBE2 scene, August 22, 2001. (Lower left) PROBE2 scene, October 1, 2001. (Lower right) Decision-based classifier fusion method that uses ISMAP with the three single-scene classifiers as inputs.

IEEE

conference  
paper



journal paper

and . . .

- how to write a resume (Amina Sonnie, College of Eng)  
and
- how to present a conference paper (Martha Ostheimer,  
ECE)



and . . .

- How to use UA resources in
  - literature searches (Sai Chinnaswamy, UA Library)
  - job searches (Amina Sonnie, College of Eng)

# Class Schedule

Subject to  
change

Aug 23	Introduction
Aug 30	Theses & dissertations
Sept 6	Journal papers
Sept 13	Conference papers
Sept 20	Conference presentations
Sept 27	student presentations
Oct 4	student presentations
Oct 11	student presentations
Oct 18	Library tools
Oct 25	student presentations
Nov 1	student presentations
Nov 8	student presentations
Nov 15	Resume writing and job search
Nov 22	student presentations
Nov 29	student presentations
Dec 6	student presentations

# Introduction

- Writing or presenting to an audience will be an important part of your career!
- For any writing or presentation job, the first task is to define your audience

# Target Your Audience

- General types
  - equal peers (technical, probably understand your work in detail)
  - unequal peers (technical, may or may not understand your work)
  - supervisors (technical/non-technical, may, but often don't, understand your work)

# Examples

- thesis/dissertation: equal peers (your committee)
- journal paper: equal and unequal peers (reviewers and readers)
- conference presentation: unequal peers (your audience)
- business or research proposal: unequal peers and supervisors (reviewers and your management)

# Remember Your Audience

- As you write a document, remember who will read it
- If it's unequal peers, include more explanatory material
- If it's supervisors, include even more explanatory and justification material

# Literature Citations

- Common to all forms of technical writing
- For thesis/dissertations, begin compiling a literature bibliography as soon as you have a research topic
- Use software tools, including online literature databases and PC bibliography makers

# Why?

- Necessary and sufficient literature references set the context for your work
- Professional ethics demand acknowledgment of others' relevant work
- Many documents are "peer-reviewed" before publication - one criterion is completeness of reference list



# What needs to be cited?

- Any publication, e.g. books, journal papers, conference papers,
- Certain types of “unpublished” information, e.g. websites, reports, private communications and
- Anything else that is used in or is important for your work, e.g. a specialized “published” software program

# What about Internet citations?

- URLs are not permanent; use sparingly
- If equivalent permanent reference exists, e.g. a published paper, use that instead or in addition

- **Basic Book/Monograph Online Sources:** Author. (year, month, day). Title (edition) [Type of medium]. Volume(issue). Available: [`http://www.\(URL\)`](http://www.(URL))

J. Jones. (1991, May 10). Networks (2nd ed.) [Online]. Available: [`http://www.atm.com`](http://www.atm.com)

- **Journal Online Sources style:** Author. (year, month). Title. Journal [Type of medium]. Volume(issue), paging if given. Available: [`http://www.\(URL\)`](http://www.(URL))

R. J. Vidmar. (1992, August). On the use of atmospheric plasmas as electromagnetic reflectors. IEEE Trans. Plasma Sci. [Online]. 21(3). pp. 876—880. Available: [`http://www.halcyon.com/pub/journals/21ps03-vidmar`](http://www.halcyon.com/pub/journals/21ps03-vidmar)

# IEEE citation style

- Microsoft Word and LaTeX templates at <http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.htm>
- Citation in text is [number], where number is assigned uniquely to each reference: 1, 2, ...

# Examples

□ Transactions and other peer-reviewed journals

□ *submitted for review and waiting for decision:*

[1] J. Wang, "Fundamentals of erbium-doped fiber amplifiers arrays," IEEE J. Quantum Electron., submitted for publication.

□ *accepted and waiting for publication:*

[2] E. H. Miller, "A note on reflector arrays," IEEE Trans. Antennas Propagat., to be published.

□ published (single author):

[3] J. U. Duncombe, "Infrared navigation—Part I: An assessment of feasibility," IEEE Trans. Electron Devices, vol. ED-11, pp. 34-39, Jan. 1959.

□ published (multiple authors):

[4] S. Chen, B. Mulgrew, and P. M. Grant, "A clustering technique for digital communications channel equalization using radial basis function networks," IEEE Trans. Neural Networks, vol. 4, pp. 570-578, July 1993.

- Conferences

- published in proceedings:

- S. P. Bingulac, "On the compatibility of adaptive controllers," in Proc. 4th Annu. Allerton Conf. Circuits and Systems Theory, New York, 1994, pp. 8-16.

- not published in proceedings:

- J. G. Kreifeldt, "An analysis of surface-detected EMG as an amplitude-modulated noise," presented at the 1989 Int. Conf. Medicine and Biological Engineering, Chicago, IL.

- Private communication (e.g. conversation with a person or an email or letter)

- C. J. Kaufman, Rocky Mountain Research Lab., Boulder, CO, private communication, May 1995.

# Bibliographic Software

ProCite	<a href="http://www.procite.com/">http://www.procite.com/</a>	Win, Mac OS
EndNote	<a href="http://www.endnote.com/">http://www.endnote.com/</a>	Win, Mac OS X
Reference Manager	<a href="http://www.refman.com/">http://www.refman.com/</a>	Win
Bookends	<a href="http://www.sonnysoftware.com/">http:// www.sonnysoftware.com/</a>	Mac OS X
BibTeX	various	LATeX