

# Inmi Kim

## Curriculum Vitae

Department of Mathematics  
 University of Illinois at Urbana-Champaign  
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### Education

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- **Ph. D. Candidate in Mathematics** *expected May 2011*  
 University of Illinois at Urbana-Champaign (UIUC)  
 Advisor : Richard S. Laugesen  
 Dissertation : *Gabor Frames with Trigonometric Spline Dual Windows*
- **M.S. in Mathematics** *February 2005*  
 Ewha Womans University, Seoul, South Korea  
 Advisor : June-yub Lee  
 Thesis : *Image Processing using Wiener Filter*
- **B.S. in Mathematics** *February 2003*  
 Ewha Womans University, Seoul, South Korea

### Teaching Experience

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- **Instructor** : Responsible for all aspects of teaching and grading  
 - A Mathematical World (Math 181) *UIUC, Fall 2009*
- **Recitation** : Lectured on examples and homework problems, gave and graded quizzes  
 - Calculus (Math 220) *UIUC, Spring 2010, Spring 2008, Spring 2007*  
 - Calculus I (Math 221) *UIUC, Fall 2007*
- **Tutoring and Grading** : Tutored and graded exams and homeworks *Fall 2008, Spring 2009, Fall 2005 ~ Fall 2006*  
 - Real Analysis I (Math 540, Graduate course)  
 - Complex Variables (Math 448)  
 - Differential Equations (Math 441)  
 - Introduction to Differential Equations (Math 286)  
 - Elementary Linear Algebra (Math 125)

## Publications

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- *Gabor Frames with Trigonometric Spline Dual Windows, in preparation*

## Research Interest

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- Harmonic and Time-Frequency analysis
- Gabor frames and Gabor ridgelets
- Wavelets and representation of functions in the discrete sense
- Connections to signal processing from Harmonic analysis

## Honors and Scholarships

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- Research Assistantship UIUC, Fall 2010
- List of Teachers ranked as Excellent - Calculus (Math 220) UIUC, Spring 2010
- List of Teachers ranked as Excellent - Calculus I (Math 221) UIUC, Fall 2007

## Talk

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- **AMS Special Session on Sparse Data Representations and Applications**  
Georgia Southern University, Mar. 2011
- **Women in Mathematics Seminar**  
 - *Constructions of Gabor dual windows* UIUC, Oct. 23, 2009

## Conferences attended

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- 8<sup>th</sup> Illinois/Missouri Applied Harmonic Analysis Seminar UIUC, Oct. 16, 2010
- 3<sup>rd</sup> Illinois/Missouri Applied Harmonic Analysis Seminar Illinois Wesleyan Univ.  
Apr. 19, 2008

## Computer skills

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- **Programming**  
 - MATLAB, Mathematica, HTML, C++
- **Word processing**  
 - LATEX, Excel, Powerpoint, Word