

# Xiaowen Li

## EDUCATION

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### UNIVERSITY OF SOUTH FLORIDA

PHD IN COMPUTER SCIENCE  
2021 - present | Tampa, FL

### UNIVERSITY OF KANSAS

MASTER OF ARTS IN MATHEMATICS  
2018 - 2021 | Lawrence, KS

### BAYLOR UNIVERSITY

BACHELOR OF SCIENCE IN MATHEMATICS  
MINOR IN COMPUTER SCIENCE  
May 2018 | Waco, TX  
Cum. GPA: 3.62 / 4.0 | Major GPA: 3.78 / 4.0  
Provost's Gold Scholarship

## THESIS

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1. Xiaowen Li, "Randomized Algorithms for Solving Singular Value Decomposition Problems with Matlab Toolbox", University of Kansas (**Master's Thesis**), May 2021.

## RESEARCH

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### NUMERICAL LINEAR ALGEBRA | MASTER'S RESEARCH

ADVISOR: Dr. Agnieszka Międlar  
Aug 2020 – May 2021 | Lawrence, KS  
<https://miedlar.ku.edu/research.html>

- Solving low-rank large matrix with randomness
- Creating a tool box for Matlab
- Thesis can be found at <https://www.proquest.com/docview/2835386429>

### ITERATIVE METHODS | MATH DEPARTMENT UNDERGRAD RESEARCH

INSTRUCTOR: Dr. Ron Morgan  
Jan – May 2017 | Waco, TX  
[http://sites.baylor.edu/ronald\\_morgan/research-interests/](http://sites.baylor.edu/ronald_morgan/research-interests/)

- Implement stochastic and non linear programming techniques in Matlab
- Focus on algorithm improvement to find eigenvalues for large matrices more efficiently
- Specially working on ritz values from Krylov subspace methods with symmetric, bidiagonal matrices

## TEACHING

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SPRING 2023 | TEACHING ASSISTANT | COMPUTATIONAL GEOMETRY

COT 4521 for undergrads

SPRING 2022 | TEACHING ASSISTANT | ANALYSIS OF ALGORITHMS

COT4400 for undergrads

FALL 2020 - SPRING 2021 | TEACHING ASSISTANT | MATH 125

Math 125 Calculus I Lab for science major

FALL 2019 - SPRING 2020 | INSTRUCTOR | MATH 115

Online session Math 115 Calculus I for non-major

FALL 2018 - SPRING 2019 | TEACHING ASSISTANT | MATH 101

Kansas Algebra Program - College Algebra

## HONORS AND AWARDS

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2015 - 2018 | PROVOST'S GOLD SCHOLARSHIP

2013 | NATIONAL PATENT

The first inventor and applicant of the national patent

< Ammonium chloride decomposition test tube for experimental teaching>

[CN203108560 (U)].

## SOCIETY

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2023 - CURRENT | GRADUATE STUDENT MEMBER | IEEE

The Institute of Electrical and Electronics Engineers

2018 - 2021 | SPONSORED STUDENT MEMBER | AMS

American Mathematical Society

2018 - 2021 | SPONSORED STUDENT MEMBER | AWM

Association for Women in Mathematics

2017 - 2018 | MENTEE | GUMP

Graduate Undergraduate Mentorship Program for Math Major