

Theresa Migler-VonDollen

Department of Computer Science
California Polytechnic State University
Frank Pilling Building, 14-226
San Luis Obispo, CA, 93407
tmigler@calpoly.edu

EDUCATION

Ph.D., Computer Science, June 2014
Oregon State University, Corvallis
Major: Computer Science
Minor: Mathematics
Advisor: Glencora Borradaile

MS, Computer Science, June 2013
Oregon State University, Corvallis
Major: Computer Science

MS, Mathematics, December 2006
California Polytechnic University, San Luis Obispo
Major: Mathematics

BS, Mathematics, June 2004
California Polytechnic University, San Luis Obispo
Major: Mathematics
Minor: Philosophy

EXPERIENCE

Assistant Professor Fall 2018 - Present
California Polytechnic State University, Computer Science Department

- CPE 349 - Design and Analysis of Algorithms
- CSC 570 - Advanced Algorithmic Graph Theory

Visiting Professor Fall 2018 - Winter 2019
Munich University of Applied Science, Computer Science and Mathematics

- Algorithms and Datastructures I
- Graduate Graph Theory

Lecturer Fall 2015 - Spring 2018
California Polytechnic State University, Computer Science Department

- CPE 349 - Design and Analysis of Algorithms
- CPE 101, 103 - Fundamentals of Computer Science
- CPE 348 - Discrete Structures
- CPE 441 - Bioinformatics Algorithms

Lecturer Fall 2014 - Spring 2015
University of California Santa Cruz, Jack Baskin School of Engineering

- CMPS 17 - Social Networks
- CMPS 5P - Introduction to Python
- CMPS 10 - Introduction to Computer Science

Lecturer Summer 2012, 2014
Oregon State University, EECS Department

- CS 325 - Undergraduate Algorithms

Teaching Assistant Fall 2010 - Spring 2014
Oregon State University, EECS Department

- CS 325 - Undergraduate Algorithms
- CS 381 - Undergraduate Programming Languages
- CS 515 - Graduate Algorithms

Teaching Assistant Fall 2008 - Spring 2010
Oregon State University, Math Department

- MATH 251, 111, 112 - Calculus and Pre-Calculus

Lecturer Fall 2006 - Spring 2008
California Polytechnic State University, Math Department

- Math 116, 117, 118, 119, 141, 142, 143 - Calculus and Pre-Calculus

Lecturer Fall 2006 - Spring 2008
Cuesta Community College, Math Department

- Math 23, 27, 32 - College Algebra and Pre-Calculus

Teaching Associate Fall 2004 - Spring 2006
California Polytechnic State University, Math Department

- Math 116, 117, 118, 119 - Pre-Calculus

PUBLICATIONS Theresa Migler, Glencora Borradaile, and Gordon Wilfong.

- Random Network Models Based on Density *Complex Networks* Cambridge 2018

Theresa Migler.

- Lower bounds for testing digraph connectivity with one-pass streaming algorithms. *IEEE Letters of the Computer Society* 2018

Theresa Migler, Lizabeth Schlemer.

- Engagement in Practice: Teaching Introductory Computer Programming at County Jails *ASEE* 2018

Theresa Migler, Glencora Borradaile, and Gordon Wilfong.

- Density decompositions of networks *CompleNet* 2018

Glencora Borradaile, Jennifer Iglesias, Theresa Migler, Antonio Ochoa, Gordon Wilfong, and Lisa Zhang.

- Egalitarian graph orientations. *Journal of Graph Algorithms and Applications*, 2017 - Lead Author

Theresa Migler, Kent Morrison, Mitchell Ogle.

- How Much does a Matrix of Rank k Weigh? *Mathematics Magazine* 2006

GRANTS

“Polynomial Time Approximation Schemes for Graph Optimization Problems”

PI

Research, Scholarly, and Creative Activities Grant Program (pending decision) \$7,887

“Bioinformatics Cross-Disciplinary Studies Minor”

Co-PI (Edward T. Himmelblau, PI)

Center for the Advancement of Women in Technology

\$400,000

**STUDENT
SUPERVISION**

Current MS Students

- Michael Cantrell
- Iris Kohler
- Christopher Siu

Current Senior Project Students

- Alexander James Bailey
- Sean Gonzales
- David James
- Sharon Kuang
- Mitchell Overfield
- Dmitriy Timokhin

MS Students Defended

- Siddhant Kahal *Bird Abundance at Bird Feeders in Response to Temperature, Wind Speed, and Precipitation during the Winter Season* Spring 2018

Past Senior Projects

- Collin Wong
- Samuel Chase
- Daniel Yao
- Timothy James Jyung
- Lohit Vankineni

Students Involved in Jail Project

- Cassie Hamilton
- Caleb Kim
- Yusuf Bahadur
- Terry Wambolt
- Larry Hu
- Chris Moranda
- Abby Schmiedt
- Hayley Cushing

SERVICE

Creator of Computer Program at local jails

Summer 2015 - Present

- Proposed a new program for the Men's and Women's jails, and the Men's and Women's honor farms.
- Created materials for an Introduction to Programming with Python course - a course similar to the first 4 weeks of CPE101.
- Taught this course four times.
- Involved 10 Cal Poly students in creating materials and assisting in teaching at the jail.

Indian Student Association Faculty Advisor

Fall 2016-2017

Wikipedia author/editor

2011-Present

Maryknoll lay volunteer

Summer 2012

- Volunteer math teacher to Mon refugees at Wat Prok in Bangkok, Thailand.

- Collaboratively developed and taught an introductory programming course using Python.

Get on the Bus- bus coordinator 2007-2008

AWARDS AND HONORS

SWE “Most Supportive Professor” Nominee Fall 2015

M. Lehman Mathematics Educator Scholarship Recipient 2006

National Science Foundation Scholarship Recipient 2005-2006

College of Science and Mathematics Senior Recognition Award Contributions to the Objectives and Public Image of the University 2004