

# Wei Trinh

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## EDUCATION

### TEXAS A&M UNIVERSITY | PHD IN ELECTRICAL ENGINEERING

August 2016 - Present | College Station, TX

### UNIVERSITY OF MARYLAND BALTIMORE COUNTY (UMBC) | BS IN PHYSICS, CUM LAUDE

August 2012 - June 2016 | Baltimore, MD

### UNIVERSITY OF MARYLAND BALTIMORE COUNTY (UMBC) | BS IN MATHEMATICS, CUM LAUDE

August 2012 - June 2016 | Baltimore, MD

## SKILLS

**PROGRAMMING** Mathematica • Matlab • Python • PowerWorld • C • C++ •  $\LaTeX$

## EXPERIENCE

### TAMU DEPARTMENT OF ELECTRICAL ENGINEERING | TEACHING ASSISTANT FOR ECEN 460

August 2018 - Present | College Station, TX

- Instructed students on the fundamentals of  $3\phi$  power systems, and provided guidance in learning how to use commercialized power systems analysis packages, like PowerWorld.

### TAMU DEPARTMENT OF ELECTRICAL ENGINEERING | TEACHING ASSISTANT FOR ECEN 215

August 2016 - May 2018 | College Station, TX

- Instructed students on basic circuit design and developed students abilities to analyze and understand circuits.
- Revamped the entire lab manual for the course, making it more intuitive for students unfamiliar with circuit theory, and included ample reference material for students to use to understand how to build and understand circuits.

### IEEE TEXAS POWER & ENERGY CONFERENCE | COMMITTEE MEMBER AND REVIEWER

August 2018 - February 2019 | College Station, TX

- Helped to contact and arrange financial sponsors for the event.
- Acted as a liaison between financial sponsors and the committee during the conference.
- Reviewer for conference papers.

### UMBC DEPARTMENT OF PHYSICS | LEARNING ASSISTANT FOR PHYS 121

January 2013 - May 2014 | Baltimore, MD

- Assisted students with learning basic Physics principles, and the visualization of said principles through the use of Python.

### UMBC DEPARTMENT OF PHYSICS | LAB SETUP ASSISTANT

June 2014 - June 2016 | Baltimore, MD

- Helped to set up and check all laboratory equipment for the introductory labs.
- Optimized and assisted in the restructuring of student labs for better delivery of Physics concepts.

### UMBC MEYERHOFF SCHOLARS PROGRAM | MEYERHOFF COUNCIL MEMBER

August 2012 - June 2016 | Baltimore, MD

- Acted as a liaison between students and faculty of the Meyerhoff Program.
- Organized and ran various student events in order to cultivate a family environment in the program.

## RESEARCH

### OVERBYE LAB | GRADUATE RESEARCH ASSISTANT

PI: Dr. Thomas Overbye | February 2018 – Present | College Station, TX

Working under Dr. Thomas Overbye in the field of power systems. Currently researching modal analysis techniques for large-scale synthetic power systems, and how they can be leveraged to improve various aspects of the grid.

### CHEN LAB | REU RESEARCH ASSISTANT

PI: Dr. Long-Qing Chen | May 2015 - August 2015 | State College, PA

Comsol was used to optimize a computational model of a thin-film polymer capacitor, with the aim of minimizing the internal temperature based on physical constraints.

## **SPARLING LAB | UNDERGRADUATE RESEARCH ASSISTANT**

PI: Dr. Lynn Sparling | December 2015 - August 2016 | Baltimore, MD

Used a combination of Python and Mathematica to analyze large sets of wind data, in order to determine the most optimal design for a wind farm over a given piece of land.

## **PUBLICATIONS**

Z. Wang, Q. Li, W. Trinh, Q. Lu, H. Cho, Q. Wang, and L. Chen, "Optimal design of high temperature metalized thin-film polymer capacitors: A combined numerical and experimental method," *Journal of Power Sources*, vol. 357, pp. 149 – 157, 2017.

W. Trinh, J. Tyler, S. Villareal, M. Rahimian, and N. Gober, "ECEN 215 Lab Manual," *ECEN 215 Course*, August 2018

W. Trinh, K.S. Shetye, I. Idehen, and T. Overbye, "Iterative Matrix Pencil Method for Power System Model Analysis," 2019 52<sup>nd</sup> *Hawaii International Conference on System Sciences*, January 2019.

## **HONORS**

**Meyerhoff Scholar**, University of Maryland Baltimore County, August 2012

**NIBIB Scholar**, University of Maryland Baltimore County, August 2014