

# Tommy Meek

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<https://github.com/tommymeek123>

## EDUCATION

- **Master of Science, Mathematics** | GPA: 3.88  
Wake Forest University  
Winston-Salem, NC  
May 2023
- **Bachelor of Science, Mathematics, Computer Science** | GPA: 3.92  
Western Carolina University  
Cullowhee, NC  
May 2021
- **Associate of Science** | GPA: 4.00  
Southwestern Community College  
Sylva, NC  
December 2018

## TECHNICAL SKILLS

- **Proficient with:** Python, Java, JavaScript, Haskell, MATLAB, Git,  $\text{\LaTeX}$
- **Familiar with:** C, C++, MIPS, Rust, HTML, CSS, SQL, R, Bash, PowerShell, Vim, Macaulay2

## PROFESSIONAL EXPERIENCE

- **Teaching Assistant** | Wake Forest University  
August 2021 - May 2023
  - Led weekly study sessions to ensure student success and taught courses in the absence of the professor.
  - Tutored undergraduate students in a one-on-one setting and in groups as large as twenty.
  - Graded up to fifty student assignments per week while maintaining a full-time graduate course load.
- **Math/Computer Science Tutor** | Western Carolina University  
August 2019 - July 2021
  - Voted *Most Valuable Tutor* by coworkers and peers.
  - Tutored undergraduate students in a one-on-one setting and in groups as large as fifteen.
  - Mentored up to thirty walk-in clients per day for all math and computer science courses.
  - Assisted in the instruction of computer science lab courses of up to forty students by answering questions and verifying the accuracy of their Python or Java lab assignments.
- **Table Games Dealer** | Harrah's Cherokee Casino  
September 2009 - July 2019
  - Proficiently dealt casino games including craps and blackjack at a high pace.
  - Provided service and entertainment to up to hundreds of guests per day.
  - Ensured game security by being mindful of all active players and other nearby guests.

## RESEARCH

- Master's thesis: "A Functional Computer Algebra System for Polynomials"
- "An Axiomatic and Contextual Review of the Armitage and Doll Model of Carcinogenesis"  
Published in *Spora: A Journal of Biomathematics* Volume 8 (2022)
- "Algebraic Properties of a Hypergraph Lifting Map"  
Published in *Integers* Volume 21 (2021)
- "Avoiding Monochromatic Sub-paths in Uniform Hypergraph Paths and Cycles"  
Available at <https://arxiv.org/abs/2003.00035>

## PRESENTATIONS

### UNCG Regional Mathematics and Statistics Conference (Virtual)

*Avoiding Blue Edges in 3-uniform Hyperpaths*

University of North Carolina Greensboro | Greensboro, NC | November 14, 2020

### WCU SURP Symposium (Virtual)

*Algebraic Properties of a Hypergraph Lifting Map*

Western Carolina University | Cullowhee, NC | October 16, 2020

### SCC Lunch and Learn

*Canceled due to COVID-19*

*Undergraduate Research at Western Carolina University*

Southwestern Community College | Sylva, NC | March 20, 2020

### Mathematical Association of America Southeastern Section Meeting

*Canceled due to COVID-19*

*Avoiding Blue Edges in 3-uniform Hyperpaths*

High Point University | High Point, NC | March 13, 2020

### Joint Mathematics Meetings Undergraduate Student Poster Session

*Monochromatic Subhypergraphs in Stochastic Processes on Hypergraphs*

Colorado Convention Center | Denver, CO | January 17, 2020

## AWARDS AND ACHIEVEMENTS

- 2020-2021 WCU Senior Mathematics Award
- 2020-2021 WCU Advanced Computer Science Award
- 2020-2021 WCU Dean's Outstanding Scholar in Mathematics
- Score of 10 on the 2020 William Lowell Putnam Mathematical Competition

## GRANTS AND SCHOLARSHIPS

- 2022 Wake Forest summer thesis grant \$3,000.00
- 2020-2021 L.E.A.R.N. Scholarship \$2,000.00
- 2020-2021 Breitenbach Scholarship \$1,381.00
- 2020-2021 George A. Milton Scholarship \$1,213.00
- 2020 SURP research grant \$5,300.00
- 2019-2020 CURM research grant \$3,000.00