

Thomas Kaldahl

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github.com/ei14 ↗

Math Courses

Algebra Algebra I–IV (grad. level),
Intro Operator Theory,
Intro Category Theory,
Honors Linear Algebra

Analysis Honors Real Analysis I,
Real Analysis II,
Complex Analysis

Calculus Intro Diff'l Geometry,
Honors Calculus I–IV,
Differential Equations

Other Courses

Comp. Sci. Algorithm Analysis,
Discrete Math,
Mainframe Computing

Physics Intro Relativity &
Quantum Mech.,
Honors Mechanics,
Honors Electromech.

Programming

Very familiar: Python, C, JS

Familiar: Bash, Java, C++

Used: z/OS COBOL,
x86 Assembly

Misc. Skills

Japanese language training

LaTeX typesetting

Parametric CAD & Part design

3D Modeling & Animation

Electronics, PCB design

Woodworking, Welding experience

Education

- Rice University *Aug. '20 – Dec. '24*
 - Bachelor of Science in Mathematics
 - Cumulative GPA: 3.682
- Clements High School, Sugar Land, TX *Aug. '16 – May '20*
 - GPA: 4.000

Leadership

- Teaching Assistant in Computer Science *Spring – Fall '24*
 - Assisted students with course content
 - * Both during class and out of class
 - Graded student work
- Co-President of Rice AWM *Fall '23 – Spring '24*
 - AWM: Association for Women in Mathematics
 - Planned university events with other co-president to invite underrepresented groups to the math community

Research

- Coronavirus Genetic Analysis *Summer '22 & '23*
 - Wrote scripts to organize DNA data from raw outputs
 - Constructed phylogenetic trees using BEAST
 - Worked under Dr. Andrew Kitchen, University of Iowa
- Combinatorics & Graph Theory *Summer '21*
 - Wrote software to analyze certain properties of graphs
 - Conjectured classification of graphs w/ prop'ty of interest
 - Worked under Dr. Peter Blanchard, University of Iowa

Awards

- Putnam Math Competition – Top 21% *Fall '22*
- Rice University Hackathon *Fall '21 & '22*
 - 2nd place overall in 2022 – team of 4
 - * Crisis aversion app/network for university students to seek acute care for mental health emergencies ↗
 - 3rd place in 2021 – 1st among “First Timers” – team of 3
 - * Disability accessibility interface for motor-impaired people to navigate YouTube ↗
- Rice University Scholarship, full tuition *Spring '20*
- Trinity University: Tower Scholarship, full tuition *Spring '20*
- Science Olympiad team, 6th place nationally *Spring '17*