

Thomas Kaldahl

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github.com/ei14 ↗

Education

- Rice Univ. Aug. '20 – Dec. '24
 - BSc. of Mathematics
 - Cumulative GPA: 3.78
- Clements HS Aug. '16 – May '20
 - GPA: 4.00

Math Courses

Abstract Algebra I/II
Honors Analysis
Honors Calculus IV/III
Honors Linear Algebra

Prog. Languages

Intimately familiar: C, Python
Familiar: JavaScript, C++,
Linux Shell, Java
Used before: C#, PHP, Go, Lua,
x86 Assembly
Learning: Rust, Haskell

Software Experience

Engineering: KiCad, FreeCAD
3D Arts: Blender, Unity
2D Arts: GIMP, Inkscape, Krita
Audio: Audacity, LMMS
Markup: \LaTeX , HTML & CSS

Misc. Skills

Japanese language training
Electronics, PCB design
Woodworking, welding experience

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
 - Proposed novel conjecture on graph property
 - Worked under Dr. Peter Blanchard, University of Iowa

Leadership

- Co-president of Rice AWM *Fall '23 – Spring '24*
 - AWM: Association for Women in Mathematics
 - Planned university events with other co-president to invite more people to the math community
- Technical officer of JETS *Fall '17 – Spring '18*
 - JETS: Junior Engineering & Technical Society
 - Participated in Science Olympiad team (*see award*)
 - Co-coordinated statewide Science Olympiad tournament
 - * Designed & deployed live scheduling system for sponsors to view & reserve timeslots in real-time
 - * Created latency-correcting website to sync across several computers and time contestants
 - Created secure account database & front-end website

Awards

- 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*
 - Designed & implemented touch-compatible user interface to simulate & control robot arm in real-time
 - Created 3D models in parametric CAD for chassis of model electric vehicle