

Curriculum Vitae
Gregory Thomas Croisdale
CSE PhD Student

University of Michigan
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<https://g.regory.dev>

Technology Skills

Programming Languages: Python, JavaScript/TypeScript, C, C++, C, React (Native), Mips, RISC-V.
Operations Technologies: Continuous Integration, Git, Docker.
Programs: Blender, Adobe Photoshop, Adobe Illustrator, Adobe Premiere, GIMP.

Academic Background

PhD Student in Computer Science Aug 2022 - Current
University of Michigan
M.S. earned in May 2024

B.S. Computer Science Aug 2018 - May 2022
University of Tennessee, Knoxville

Experience

Teaching Assistant, Alien Anatomy: How ChatGPT Thinks Jan 2024 - April 2024
University of Michigan, Ann Arbor
Program in Computing for the Arts and Sciences
With Mark Guzdial and Steve Abney

- Created and delivered course lectures,
- Designed and evaluated assignments,
- Managed a group of undergraduate graders, and
- Created interactive course components to demonstrate principles of AI.

Teaching Assistant, EECS 183 Aug 2023 - Dec 2023
University of Michigan, Ann Arbor
College of Electrical Engineering and Computer Science
With Ben Torralva, Steven Bogaerts, and William Arthur

- Taught a weekly lab section,
- Met weekly to administrate over 30 lab sections,
- Oversaw grading team,
- Assisted with exam and assignment creation.

Research Assistant Jan 2022 - Aug 2022
University of Tennessee, Knoxville
MoSIS Research Group
Advised by Dr. Jian Liu

- Regularly met a team of Undergraduate, Graduate, and Professional researchers,
- Independently developed various applications for research and reproducibility purposes,
- Read, wrote, and submitted research papers with group members,
- Performed collaborative data science and application development.

Research Assistant Jan 2021 - Jan 2022
University of Tennessee, Knoxville
PAIRS Research Group
Advised by Dr. Alex Williams & Dr. Austin Henley

- Regularly met a team of Undergraduate, Graduate, and Professional researchers,
- Independently developed various applications for research and reproducibility purposes,
- Read, wrote, and submitted research papers with group members,

- Performed collaborative data science and application development.

Research Assistant Jun 2021 - Oct 2021

Stony Brook University
TEALab Research Group

Advised by Dr. Rezaul Chowdhury

- Regularly met a team of Undergraduate, Graduate, and Professional researchers,
- Wrote code generation suites for theoretical algorithms created by group,
- Assisted in the benchmarking of suite in ARM Supercomputer Ookami,
- Wrote and submitted research paper to leading journal.

Teaching Assistant, COSC 102 and COSC 130 Jan 2020 - May 2021

University of Tennessee, Knoxville
College of Electrical Engineering and Computer Science

Advised by Dr. Stephen Marz

- Met bi-weekly with Professor and other TAs,
- Taught a weekly lab section,
- Created materials to help students review,
- Assisted in the creation and revision of assignments, and
- Graded student work and provided meaningful feedback.

Research Assistant Jun 2019 - Aug 2020

University of Tennessee, Knoxville
Educational Leadership and Policy Studies Department

Advised by Dr. Karen Boyd

- Worked with a small team of students from different fields,
- Lead the creation of various research websites,
- Created an interactive history game on ARIS,
- Collected and edited hundreds of hours of video and audio recordings,
- Scanned and digitally remastered court documents, newspapers, and transcripts, and
- Presented research at several events and conferences.

Leadership

Design Team Administrator Jun 2020 - Aug 2020

Educational Leadership and Policy Studies

Advised by Dr. Karen Boyd

- Designed fully comprehensive remote research environment,
- Collaborated with interdisciplinary group on a daily basis,
- Documented progress in daily and weekly segments,
- Created design documents and proposals for group presentation,
- Presented prototyped game mechanics and dynamics.

Computer Science Supplemental Instructor Aug 2019 - Jun 2020

University of Tennessee, Knoxville

Student Success Center

Advised by Dr. Jennifer Hewardine

- Attended leadership and team-building training,
- Regularly created review materials for Computer Science students,
- Maintained consistent communication with hundreds of students, and
- Led study groups twice a week with information relevant to course content.

Service

University of Michigan CSE DEI Discussions, *Roundtable Moderator* Oct 2023

University of Michigan AI Symposium, *Poster Chair* Oct 2023

Xplore Engineering program for Middle Schoolers, *Program Presenter* Jul 2023

Hart Strings, *Member and Student Leader* Aug 2012 - Aug 2020

KYSO, *Orchestral Assistant* Aug 2010 - May 2018

Saint John XXIII, *Violinist* Mar 2014 - Jun 2018

Publications	<p>SmarCyPad: A Smart Seat Pad for Cycling Fitness Tracking Leveraging Low-cost Conductive Fabric Sensors IMWUT. September 2023.</p> <p>FOURST: A code generator for FFT-based fast stencil computations IEEE ISPASS 2022. Singapore. May 2022.</p> <p>Exploring Learning Approaches for Ancient Greek Character Recognition with Citizen Science Data 17th IEEE eScience 2021. Online. Sept 2021.</p>
Posters	<p>DeckFlow: A Card Game Interface for Exploring Generative Model Flows ACM Symposium on User Interface Software and Technology. San Francisco. Oct 2023. University of Michigan AI Symposium. Ann Arbor. Oct 2023.</p> <p>Rubikon: A Multimodal Tutor for 3D Physical Task Learning Best Demo Award; University of Michigan AI Symposium. Ann Arbor. Nov 2022.</p> <p>Improving Accessibility to FFT Stencil Computations IACS DCD REU. Stony Brook University. Aug 2021.</p> <p>Montgomery 1960: Using Technology to Teach Empathy and Perspective Taking American Historical Association Annual Conference. NYC. Jan 2020. EUR̄KA. Knoxville, TN. April 2020.</p> <p>Improving the Empathetic Response of Academically Focused Students through Historical Gamification UTK Discovery Day. Knoxville, TN. Aug 2020.</p>
Awards and Grants	<p>Best Demo Award, <i>UMich 2022 AI Symposium</i>, Rackham Merit Fellowship, <i>UMich 2022</i>, Excellence and Distinction in Undergraduate Research, <i>UTK 2022</i>, NSF REU (1950042) Grant Participant, <i>Stony Brook University 2021</i>, Gonzalez Family Outstanding Undergraduate Teaching Assistant, <i>UTK 2021</i>, SURGE Grant Recipient, <i>UTK 2020</i>, and Undergraduate Research Travel Grant, <i>UTK 2020</i>.</p>
Relevant Coursework	<p>University of Michigan, Ann Arbor</p> <ul style="list-style-type: none">• COSC 583: Advanced Operating Systems. Fall 2023.• INFO 612: Pervasive Interaction Design. Fall 2023.• COSC 598: Ethics for AI and Robotics. Spring 2023.• COSC 598: Human-AI Interaction & Systems. Spring 2023.• COSC 592: AI Foundations. Fall 2022.• COSC 593: HCI. Fall 2022.

University of Tennessee, Knoxville

- PHIL 395: Philosophical Foundations for Democracy; Spring 2022.
- COSC 402: Senior Design Practicum; Spring 2022.
- PHIL 371: Epistemology; Fall 2021.
- MATH 371: Numerical Algorithms; Fall 2021.
- COSC 493: Ubiquitous Computing; Fall 2021.
- COSC 401: Senior Design Theory; Fall 2021.
- COSC 340: Software Engineering; Fall 2021.
- PHIL 373: Philosophy of Mind; Spring 2021.
- MATH 499: Graph Theory; Spring 2021.
- COSC 493: RISC-V Visualization; Spring 2021.
- COSC 452: Computer Graphics; Spring 2021.
- COSC 361: Operating Systems; Spring 2021.
- PHIL 235: Formal Logic; Fall 2020.
- MATH 450: Number Theory; Fall 2020.
- ENGL 360: Technical and Professional Writing; Fall 2020.
- COSC 461: Compilers; Fall 2020.
- COSC 360: Systems Programming; Fall 2020.
- COSC 312: Algorithm Analysis and Automata; Fall 2020.
- PHIL 101: Introduction to Philosophy; Spring 2020.
- ECE 313: Probability and Random Variables; Spring 2020.
- COSC 494: Introduction to Quantum Information; Spring 2020.
- COSC 311: Discrete Structures; Spring 2020.
- COSC 302: Data Structures and Algorithms II; Spring 2020.
- MATH 231: Differential Equations I; Fall 2019.
- COSC 140: Data Structures and Algorithms I; Fall 2019.
- PHIL 244: Professional Responsibility; Summer 2019.
- COSC 130: Computer Organization; Summer 2019.
- MATH 247: Honors: Calculus III; Spring 2019.
- COSC 102: Introduction to Computer Science; Spring 2019.
- MATH 251: Matrix Algebra I; Fall 2018.
- MATH 307: Honors Introduction to Abstract Mathematics; Fall 2017.