

Cameron Mars

Curriculum Vitae

Boulder, Colorado — cameronjmars23@gmail.com — LinkedIn

EDUCATION

Bachelor's of Science in Mathematics

Year of completion: 2027

University of Colorado Boulder

College of Arts and Sciences

MATH GPA: 4.0

Overall GPA: 3.98

Bachelor's of Arts in Computer Science

Year of completion: 2027

University of Colorado Boulder

College of Engineering and Applied Science

CSCI GPA: 4.0

Overall GPA: 3.98

RESEARCH EXPERIENCE

CU Boulder Summer REU: Restricted Isometries between finite dimensional ℓ^p spaces

Summer 2025

Advisor: Alonso Delfin Ares de Parga

Researched the classification and enumeration of a previously unstudied mathematical object, which we called a *Restricted Isometry*.

Research will likely lead to publication.

POSTERS AND PROJECTS

Restricted Isometries between finite dimensional ℓ^p spaces

Presented a poster consisting of our project we conducted over the summer at the 2026 JMM conference.

The Monster Group

Presented a poster in MATH 3140: Abstract Algebra I about the Monster Group, including its representation and operation.

Image Processor Using SVD Decomposition

This project explores real-world oceanographic data from NOAA to analyze the Mariana Trench. Using techniques such as including eigenvalue decomposition and incomplete singular value decomposition (SVD), we compressed a large matrix of depth data to enable efficient analysis while preserving accuracy.

CONFERENCES

2026 JMM Conference

Attended the 2026 JMM Conference in Washington DC to give a poster presentation at the Undergraduate Poster Session about Restricted Isometries between finite dimensional ℓ^p spaces

RELEVANT WORK EXPERIENCE

Mathematics and Computer Science Tutor

Calculus series, differential equations, linear algebra, discrete math

Intro to programming, data structures, algorithms

Fall 2024 - present

Provide one-on-one assistance to students struggling in introductory math and computer science students. Provide aid with understanding and mastery of course material. Assist in creating study plans and preparing for exams.

Course Assistant

CSCI 3104: Algorithms
Spring 2026

Hosted weekly office hours to provide students with help in their Algorithms coursework, prepare for exams, and gain general understanding of topics such as algorithm complexity, dynamic programming, P vs NP, mathematical models of computation such as Turing machines, etc.

Course Assistant

CSCI 2400: Computer Systems
Fall 2025

Hosted weekly office hours to provide students with help in their Computer systems coursework, prepare for exams, and gain general understanding of topics such as binary operations, optimization, low-level assembly and machine code, etc

RELEVANT COURSES TAKEN

Spring 2026

MATH 6350: Functions of a Complex Variable I (*Graduate*)
MATH 5140: Abstract Algebra II (*Graduate*)
MATH 3110: Introduction to the Theory of Numbers
MATH 4650: Numerical Analysis I

Fall 2025

MATH 3001: Analysis I A
MATH 3140: Abstract Algebra I A
CSCI 3155: Principles of Programming Languages A

Summer 2025

CSCI 3104: Algorithms A

Spring 2025

MATH 2135: Linear Algebra for Math Majors A
MATH 2001: Discrete Math A

Fall 2024

APPM 2360: Introduction to Differential Equations with Linear Algebra A
CSCI 2270: Data Structures A

Summer 2024

CSCI 1300: Starting Computing A

Spring 2024

MATH 2400: Calculus III A

Fall 2023

MATH 2300: Calculus II A