J. Matthew Maierhofer

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EDUCATION

UNIVERSITY OF COLORADO

BS/MS in Applied Mathematics
Expected May 2019 | Boulder, CO
Minor in Computer Science
College of Engineering
Dean's List (All Semesters)
Cumulative GPA: 3.95 / 4.0

MAJOR COURSEWORK

UNDERGRADUATE

Differential Equations and Linear Algebra
Matrix Methods
Fourier Series
(Learning Asst. & Course Asst.)
Complex Analysis
(Research Asst.)
Probability
Discrete Mathematics
Applied Analysis
Data Structures
Numerical Analysis
Computer Systems
Algorithms
Abstract Algebra

GRADUATE

Mathematical Statistics
Partial Differential Equations
Applications of Complex Variables
Numerical Analysis
Machine Learning

SKILLS

PROGRAMMING

Languages:
C++ • MatLab • Mathematica
Python • LaTeX
Toolsets:
Pytorch • TensorFlow

EXPERIENCE

UNIVERSITY OF COLORADO

Fourier Series Learning Assistant/Course Assistant
February 2016 – June 2016, August 2016 – December 2016

- Tutoring and grading homework
- Course Project Development

Resident Advisor
August 2016 – Current

- Developing community and ensuring safety within the residence halls
- Worked with individual residents to develop relationships and promote success
- First response to crises in the residence halls

RESEARCH

UNIVERSITY OF COLORADO | Research Assistant

May 2016 – Present | Boulder, CO

- Researched tools for integration of complex differential equations in the complex plane
- Developed a novel Matlab-based numerical differential equation solver for the complex plane for integration around singularities
- Used developed tools to perform analysis regarding the Chazy equation.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY | Research Assistant

January 2016 - August 2016 | Boulder, CO

- Assembled Quantum sensors in NIST Laboratory
- Tested Quantum sensors in near absolute zero lab conditions

UNIVERSITY OF SOUTHERN CALIFORNIA | Research Intern

May 2017 – August 2017 | Los Angeles, CA

- Participated in the SURE research program in the Media Communications Lab at USC on Computer Vision and Machine Learning
- Helped develop on an object tracking network using convolutional neural networks and signal processing techniques for tracking pedestrians through traffic.

PROJECTS

CASIS MICRO-GRAVITY BIOLOGY PROJECT | Head of Mechanical

August 2014 – May 2015 | Centaurus High School

- Helped lead and work with a team in charge of constructing a gravity-simulating centrifuge
- Project sent to the International Space Station in March 2017.

SOCIETIES

2016-2017	Officer	CU Undergraduate Chapter of SIAM
2015-Present	Member	CU Engineering Honors
2015-Present	Member	CU BOLD Scholar