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: 3.91 / 4.0

MAJOR COURSEWORK

UNDERGRADUATE

Fourier Series
Complex Analysis
Applied Analysis
Data Structures
Computer Systems
Algorithms
Abstract Algebra

GRADUATE

Mathematical Statistics
Partial Differential Equations
Applications of Complex Variables
Numerical Analysis
Machine Learning
Natural Language Processing
Statistical Learning

SKILLS

PROGRAMMING

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

SOCIETIES

CU Undergraduate Chapter of SIAM
Officer 2016-17
CU Engineering Honors
Member 2015-Present
CU BOLD Scholar
Member 2015-Present

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 – May 2018

- 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

Teaching Assistant
August 2018 – Present

- Taught weekly recitations
- Developed quizzes and in class assignments
- Graded homeworks and exams

RESEARCH

UNIVERSITY OF COLORADO | Research Assistant

May 2016 – August 2016 | 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.

Research Assistant
November 2017 – Present | Boulder, CO

- Under Professor Mike Mozer's direction, developed a novel recurrent neural network for event prediction with a focus on temporal data
- Developed synthetic datasets, and formatted real datasets for testing of network

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

COMPLEX VARIABLES COURSE PROJECT | Submitted to CJAM

Fall 2017 | University of Colorado

- Paper on theory and applications of Schwarx-Christoffel conformal mappings.