Josh Jacobson

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EDUCATION

UNIVERSITY OF COLORADO

MS in Applied Mathematics
Expected May 2020 | Boulder, CO
Cum. GPA: N/A

BS in Applied Mathematics
Expected May 2019 | Boulder, CO
Minor in Computer Science
Minor in Atmospheric Science
Global Seminar, Rome, Italy
Engineering Honors Program
Dean's List (All Semesters)
Cum. GPA: 3.66 / 4.0

LINKS

Github: **joshhjacobson**
LinkedIn: **joshhjacobson**

SELECTED COURSEWORK

GRADUATE

Markov Process & Queuing Theory

UNDERGRADUATE

Probability Theory
Real & Complex Analysis
Numerical Analysis
Statistical Learning
Fourier Series
Ordinary & Partial Diff. Eqs.
Algorithms
Computer Systems
Data Science
Physical Oceanography

SKILLS

PROGRAMMING

Advanced:
Python • R • JavaScript • LaTeX
Familiar:
C • C++ • Matlab • Jupyter Notebooks
Wolfram Mathematica • Git • Excel

INTERESTES

Backpacking • Cycling • Alpine Skiing
Climbing • Conservation Efforts
Film • Music • Coffee

RESEARCH

DEPT. OF APPLIED MATHEMATICS | Undergraduate Researcher

Jun 2018 – Present | University of Colorado, Boulder
Worked with Michael Scheuerer and Prof William Kleiber to create an efficient and physically accurate statistical method for simulating weather analyses which were then used to analyze probabilistic forecasting metrics. Publication in preparation.

KASPRZYK RESEARCH GROUP | Software Engineer

Aug 2017 – Present | University of Colorado, Boulder
Lead the development of parasol, a Javascript library for interactive visualization of multi-objective optimization problems. Publication in preparation.

EXPERIENCE

DEPT. OF APPLIED MATHEMATICS | Learning Assistant

Aug 2018 – Present | University of Colorado, Boulder
- Held weekly office hours to help guide students on homework assignments and prepare for exams.
- Helped to design and polish final projects for the course.

RESIDENCE LIFE | Resident Advisor

Aug 2017 – May 2018 | University of Colorado, Boulder
- Based in Andrews Hall, home of the Engineering Honors Program (EHP).
- Worked to build a community where students felt welcome and involved.
- Managed social and physical conflicts between residents.
- Served as the liaison between the EHP and Residence Life, promoting continuity and communication between organizations to better support students.

VICTOROPS | Data Engineering Intern

Jan 2017 – May 2017 | Boulder, CO
- Analyzed symmetry between large SQL databases of consumer logins.
- Wrote R scripts for querying SQL and Cassandra databases and collected other frequently used company scripts into an R package for remote company-wide access. This package was reviewed and pushed to production.

DEPT. OF COMPUTER SCIENCE | Course Assistant

Aug 2016 – May 2016 | University of Colorado, Boulder
- Held weekly office hours to guide students on Matlab homework assignments and projects, reinforcing new methods of computational and algorithmic thinking.
- Helped to develop and grade exam questions for midterms and final exams.

AWARDS

2018 | Discovery Learning Apprenticeship

- Selected to give a poster presentation highlighting my experience with the Kasprzyk Group at the DLA Symposium.

2016 | COMAP Mathematical Contest in Modeling

- Honorable Mention