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
Cum. GPA: 3.66 / 4.0

LINKS

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

SELECTED COURSEWORK

GRADUATE
Markov Processes & Queueing 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 Lab
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
Working with Dr. Michael Scheuerer and Prof. William Kleiber to efficiently simulate physically realistic weather analyses using random fields. Ensemble members are then used in our development of a novel and interpretable probabilistic forecasting metric. Publication in preparation.

KASPRZYK RESEARCH GROUP | Software Engineer
Aug 2017 – Present | University of Colorado, Boulder
Leading 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
- Holding weekly office hours to help guide students on homework assignments and prepare for exams.
- Helping 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.
- Mediated conflicts and addressed residents' concerns.
- 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 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 annual DLA Symposium.

2016 | COMAP Mathematical Contest in Modeling
- Honorable Mention