ZOE BAKER

COMPUTER SCIENCE + DATA SCIENCE MAJOR

OBJECTIVE

I am a dedicated student-athlete with over a year of machine learning research experience in both an academic and industry setting. I am seeking a 2020 summer internship to further my skills in all fields of computer science.

COURSES

Data Structures
Database Management
Intro to Data Science
Linear Algebra
Probability & Statistics
Software Engineering

SKILLS

C, C++
Java
Git, Github, Gitlab
Matlab
Python
R
SQL

CONTACT

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RM 004

EDUCATION

COLORADO SCHOOL OF MINES

B.S. in Computer Science, minor in Applied Math | August 2018 - May 2022

- 4.0 GPA
- Dean's List, Fall 2018, Spring 2019
- President's Scholarship, August 2018 - Present
- Athletic Scholarship for Varsity Cross Country, Track & Field, August 2018 - Present
- Mines Undergraduate Research Fellowship, August 2019 - May 2020
- Resident Adviser (RA) for the Athleticism and Wellness Themed Learning Community

SILVER CREEK HIGH SCHOOL

High School Diploma | May 2018

- 4.351 GPA

WORK EXPERIENCE

RESEARCH ENGINEER INTERN

Lockheed Martin| May 2019 - August 2019

Worked on the Emerging Operations team to deliver Data Science and Machine Learning solutions to internal manufacturing operations:
- Implemented machine fault detection and causal analysis techniques.
- Emphasized traceable machine learning and physics-based approaches.
- Researched and applied novel algorithms and statistical methods.
- Collaborated with field experts to deliver meaningful solutions.

UNDERGRADUATE RESEARCH FELLOW

MInDS@Mines Lab, Colorado School of Mines | September 2018 - Present

Member of Machine Learning, Informatics, and Data Science research group led by Dr. Hua Wang:
- Built machine learning models using Python, NumPy, Scikit-Learn, and Keras
- Translated algorithms from academic papers into Python classes
- Applied neural networks (autoencoders) to create encoded representations of neural-imaging data
- Third author of paper, "Improved Prediction of Cognitive Outcomes via Globally Aligned Imaging Biomarker Enrichments Over Progressions" (to be presented at the MICCAI conference October 13th-17th, 2019)

AWARDS & HONORS:

- National Merit Finalist, 2018
- National AP Scholar, 2018
- FIRST Research Fellow: Research fellowship award for first year students, 2018-2019
- Mines Cross Country: First-Team All-RMAC, All-Region, National Qualifier, one of five nominees for Mines Athletics' Female Rookie of the Year, 2018
- Terumo BCT C-MAPP Scholar, 2019-2020