## Carl Schader

(720) 413-6933 · carlschader@mymail.mines.edu

#### Colorado School of Mines, 3.926 / 4.0 GPA

**Honors Research: Computer Science** 

#### **EXPERIENCE**

Maxar/SSL Robotics, Boulder, CO

May 2019 - Present

Software Engineer Intern

- · Built a virtual reality simulator and visualizer for robotic arms and satellites.
- · Wrote specialized linear algebra library in C# and used it to speed up computation for robotic arms.
- · Built networking code between VR simulator and physical robotic arms to control them in VR.

# Factor Earth/Metcalf Archaeology, Lakewood, CO

September 2018 – April

2019

Software Engineer Intern

- · Built backend web server for managing mobile and web app files.
- · Created front end web site for formatting client files and displaying client information.
- · Helped work on a mobile app frontend for android and iOS.

#### **EDUCATION**

Research August 2018- Present

- · Researching under Dr. Hao Zhang in the Human Centered Robotics Lab.
- · Specialty in Machine Learning.
- · Working to publish a paper on Bayesian Neural Networks.

#### **Colorado School of Mines**

August 2017 - May

2020

- · Honor's Research Computer Science Major.
- · C-MAPP scholar with East Daley Capital
- Tau Beta Pi Engineering Honors Society member.
- · Current undergraduate senior taking multiple graduate level CS courses.

### **ACTIVITIES AND LEADERSHIP**

- · ACM member at Colorado School of Mines.
- · Competed in the MHacks university of Michigan hackathon.
- · Competed in the Tyler Tech coding competition.
- · Created my own deep learning library. (see it at https://carlschader.github.io/)
- · Working on startup gas price tracking company.
- · Co-Host on FlyTheBox tech podcast.

#### References

Dr. Hao Zhang: Research Advisor ~ hzhang@mines.edu

Sean Dougherty: Lead Technologist at Maxar Boulder office ~ Sean.Dougherty@sslmda.com

Jiayi Liu: Head of Factor Earth startup ~  $\underline{\text{jliu@factorearth.com}}$ 

Dr. Tracy Camp: Head of Computer Science at Colorado School of Mines  $\sim \underline{tcamp@mines.edu}$