

## Education

**COLORADO SCHOOL OF MINES, *PhD Hydrologic Sciences and Engineering*** 2014-2018

### *Honors*

- Independently raised over \$200,000 in fellowships and awards (National Science Foundation, Department of Energy, and others)
- Winner of 4 conference presentation awards, including an AGU Outstanding Student Paper (top 3% of ~10,000 presentations)

### *Research*

- Built and used numerical models and HPC systems to diagnose climate change impacts in Colorado R. Rocky Mountain headwaters
- Authored 6 publications: 4 in peer-reviewed journals and first author on highlighted paper for Environmental Research Letters
- Internship at the National Center for Atmospheric Research and 2-yr Collaboration with Berkeley National Lab

### *Further*

- As president of graduate group I tripled yearly funding, launched first department merchandise, and managed 10-person team
- Co-planned and ran 2-day water scarcity conference (100 attendees) with experts from business, policy, and science sectors

**COLORADO COLLEGE, *B.A. Physics*** 2008-2011

- Senior thesis studying the intersection of physics, music, and psychology
- Active member of EQUAL, queer student group (continued through graduate school with CO School of Mines O-STEM group)

## Experience

**LAWRENCE BERKELEY NATIONAL LAB, *Government funded research facility*** **Berkeley, California**  
*Department of Energy Graduate Student Researcher*, supervisor: Kenneth Williams *Fall 2017 - Summer 2018*

- Designed and then collaborated with Berkeley scientists to validate a hyper-resolution model of the Berkeley Scientific Focus Area, resulting in publishing a new mathematical formula for scale-effective parameterizations in mountain regions

**SPOUTS OF WATER, *Social startup and NGO providing ceramic water filters to Ugandans in need*** **Kampala, Uganda**  
*Impact Director* *Spring - Summer 2017*

- Founded new impact department to legitimize efforts of both NGO and Ltd., resulting in increased capacity to secure grants, investors, as well as quantitative internal analysis to inform better and more efficient decision making
- Developed and piloted new model for NGO resulting in redesigned business strategy to shift from small, disparate projects to a donation program able to impact entire communities and reach scale across the country
- Implemented registration for products, leading to first end-user database, opening of new sales channels, and customer feedback

**SUNDANCE INSTITUTE, *Film festival with ~50,000 attendees*** **Park City, Utah**  
*Production Coordinator* *Fall 2013 - Spring 2014*

- Assisted with transformation of Park City into the largest film festival in the United States by:
  - managing 30,000 entry timeline across 20 departments and more than 50 local businesses
  - co-supervising 10-person team responsible for construction of all venues and theaters

*Assistant Warehouse Manager* *Winter 2012*

**FREELANCE OUTDOOR EDUCATOR** **China, Oregon, Colorado**  
*Developed curriculum and led or supervised leaders for outdoor programs at multiple companies* 2011-2013

- Youngest person to direct all programs for high-school girls at Cheley Colorado Camps, consistently rated in top 3 camps worldwide; responsible for training and supervising 14 staff, coordinating 30+ trips and programs for 120 campers, and parent communication
- Developed curriculum for outdoor education organizations in Colorado, Oregon and China resulting in new programs at all companies
- Secured \$20,000 grant for wilderness health training, trip planning, and 14-day horsepacking expedition in Montana

## Additional

**MUSIC**, 15 years of guitar, songwriting, singing and performing including fronting and managing a touring 5-piece band

**LANGUAGE**, fluent in Spanish, beginner in Luganda, basic programming in many languages for high performance computing applications  
R, unix, tcl, GIS, fortran, ncl, C++, python

**WILDERNESS**, Current wilderness first responder, CPR, aiare avalanche I, equine first aid, basic flatwater rescue