# Joseph McKinsey

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# **EDUCATION**

#### **COLORADO SCHOOL OF MINES**

BS IN APPLIED MATHEMATICS AND STATISTICS

Aug. 2017 - Aug. 2019 | Golden, CO Computational Applied Mathematics Cum. GPA: 4.0

#### **UCCS**

ONLINE COURSES IN MATH TAKEN CONCURRENTLY IN HIGH SCHOOL January 2015 - May 2017

#### AIR ACADEMY HIGH SCHOOL

Aug. 2013 - May 2017 | Colorado Springs, CO Cumulative GPA: 4.0

### SKILLS

#### **PROGRAMMING**

Over 1000 lines:

Python • MATLAB • LATEX • C++ • Haskell • Java • SageMath • Bash

Familiar:

R • Rust • Cog • Kotlin • C • Fortran • CSS • HTML

#### MISC.

Linux • Microsoft Word • PowerPoint • Excel Organized • Good time-management skills Optics Lab safety • Optics Techniques • Solidworks

# LINKS

Github:// https://github.com/josephmckinsey LinkedIn:// https://www.linkedin.com/in/josephmckinsey-356195146

# **ACTIVITIES**

- Racquetball Club
- ACM American Computing Machinery Club
- Putnam Seminar
- LUG Linux Users Group

#### WORK EXPERIENCE

# **NASDAQ** | SOFTWARE DEVELOPMENT INTERN / PART-TIME DEVELOPING JAVA AND DEPLOYING TO CLOUD SERVIES

June 2019 - | Golden, CO

Added support of Postgres loading on Kubernetes-deployed application

# ALGORITHMS TA | GRADER FOR CSCI 406

Jan. 2019 | Golden, CO

### ARTHUR LAKES LIBRARY | ILL ASSISTANT

Interlibrary Loans Lending: Searching and Scanning Aug. 2017 - Present | Golden, CO

#### **UCCS OPTICS LAB** | INTERN

# ASSISTING WITH PREPARATION OF LIQUID CRYSTAL CELLS

May 2017 - Aug. 2017 | Colorado Springs, CO

• Optics Lab Techniques, Safety, and Clean Room Use.

# TEAM PROJECT EXPERIENCE

## MINES MATHEMATICAL BIOLOGY PROJECT |

**EVOLUTIONARY GAME THEORY FOR Uta stansburiana**May 2018

- Developed model of lizard evolution with final report and presentation.
- Used MATLAB, systems of nonlinear differential equations, and game theory.

# **APPLIED MATH FIELD SESSION** | GENERAL TEAM-BASED MODELING COURSE

June 2018

- Worked on modeling or algorithmic problems each week.
- Used graph theory, algorithms, and simulation. Typically in MATLAB, Python, and Haskell, all with LaTeX.

# COURSEWORK

#### **UNDERGRADUATE**

- Modern Physics I
- Intro to Probability
- Intro to Math. Stats.
- Database ManagementFunctional Data Analysis
- Math. Biology

- Into. to Math Modeling
- Computational Diff. Eq.
- Complex Analysis
- Abstract Algebra
- Partial Diff. Eq.
- Algorithms

### **AWARDS**

Fall 2018 1st at ICPC Rocky Mountain Regionals
Fall 2018 Nasdaq C-MAPP Fellow
Fall 2018 2nd in Tyler Tech Programming Competition
Fall 2017 - Present Mines Dean's Honors List
Spring 2018 Runner-up to Oppenheimer Award.
Fall 2017 Putnam Exam: 11pt
CSM Medal of Achievement in Math and Science

Competitive Programming Competition Comp. Sci. Scholarship

For continuous 4.0 GPA

Competition for Ethics Related Papers in the NHV course

Mathematical Proof Competition

Mines award for promising high schoolers.