Joseph McKinsey

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EDUCATION

COLORADO SCHOOL OF MINES

BS IN PROGRESS IN APPLIED MATHEMATICS AND STATISTICS

Aug. 2017 - Dec. 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
- Math Club + Recreational Math Club

WORK FXPERIENCE

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.

MINES EPICS - ENGINEERING DESIGN PROJECT | IMPROVE URBAN INFRASTRUCTURE

Jan. 2018 - May 2018

• Created final engineering report, prototype, and presentation.

COURSEWORK

UNDERGRADUATE

- Diff. Eq. Linear Algebra
- Modern Physics I
- Intro to Probability
- Data Structures
- EPICS, Math. Physics
- Discrete Mathematics
- Math. Biology
- Algorithms

- Into. to Math Modeling
- Scientific Computing
- Computational Diff. Eq.
- Intro. to Analysis
- Complex Analysis
- Number Theory
- Abstract Algebra
- Partial Diff. Eq.

AWARDS

Fall 2018 1st at ICPC 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
2016 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.