Joseph McKinsey

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FDUCATION

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 Summa Cum Laude Cum. Unweighted GPA: 4.0

SKILLS

PROGRAMMING

Over 1000 lines:

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

Familiar:

R • Rust • Coq • 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 Club
- LUG Linux Users Group
- Math Club + Recreational Math Club

WORK FXPFRIFNCE

ARTHUR LAKES LIBRARY LILL 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 hydrophobic bridge cover for snow.
- 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 Nasdaq C-MAPP Fellow
Fall 2017 - Present Mines Dean's Honors List
Spring 2018 Runner-up to Oppenheimer Award.
Fall 2017 Putnam Exam: 11pt

Spring 2017 Knowledge Bowl
2016 CSM Medal of Achievement in Math and Science

Comp. Sci. Scholarship For continuous 4.0 GPA

 $\label{thm:competition} Competition for Ethics \ Related \ Papers \ in \ the \ NHV \ course$

Mathematical Proof Competition 3rd in state competition.

Mines award for promising high schoolers.