Joseph McKinsey

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EDUCATION

COLORADO SCHOOL OF MINES

MS IN APPLIED MATHEMATICS AND STATISTICS

Aug. 2019 - Dec. 2020 | Golden, CO Computational Applied Mathematics Cum. GPA: 4.0

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

SKILLS

PROGRAMMING

Over 1000 lines:

Java • Python • C++ • Bash • SQL • LETEX• R • MATLAB • Coq • SageMath • Rust • Kotlin

OTHER TOOLS

Linux • Git • Gitlab CI/CD • Java Spring Applications • Kubernetes • Docker • Presto • Postgres • Oracle DB • AWS • GCP

LINKS

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

ACTIVITIES

- Secretary of Linux Users Group
- International Collegiate Programming Competition (ICPC)
- Association of Computing Machinery (ACM)
- Racquetball Club

COURSEWORK

- Applied Math I and II
- Functional Data Analysis
- Probability and Math. Stats.
- Approximation with Kernels
- Integral equations
- Numerical PDEs
- Computational Linear Algebra

WORK EXPERIENCE

NASDAQ SOFTWARE ENGINEER | INTERN / PART-TIME DEVELOPING JAVA AND DEPLOYING TO CLOUD SERVIES June 2019 - | Golden, CO

- Added support of Postgres loading on Kubernetes-deployed application
- Use Java Spring in application to load data from streaming databases like Kafka into more reliable databases backed by S3 or GCS.

PROGRAMMING CHALLENGES PROFESSOR | CS298 / CS398 / CS498 (ONE CREDIT EACH)

- Teach practical algorithmic techniques using competitive programming problems.
- Sliding Window, DP, Graph problems, Tries, and others! Jan. 2020 May 2020 | Colorado School of Mines | Golden, CO

ALGORITHMS TA | GRADER FOR CSCI 406

Jan. 2019 - May 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.

MISC COLLEGE 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.

AWARDS

Spring 2019	ICPC World Finalist
Fall 2018	1st at ICPC Rocky Mountain Regionals
Fall 2018	Nasdaq C-MAPP Fellow
Fall 2017	Putnam Exam: 11pt
Fall 2018	2nd in Tyler Tech Programming Competition
Fall 2019	1st at site in ICPC Rocky Mountain Regionals
Spring 2018	Runner-up to Oppenheimer Award in NHV
Fall 2017 - Present	Mines Dean's Honors List
2016	CSM Medal of Achievement in Math and Science