

Daniel Kraft

Data Scientist Danieljk46@gmail.com

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Daniel-J-Kraft.github.io

EDUCATION

MASTERS OF SCIENCE - APPLIED MATHEMATICS AND STATISTICS

JOHNS HOPKINS – Baltimore, MD | 2020 – 2022 | GPA: 3.82/4.0

Whiting School of Engineering | Specialized in Optimization and Operations Research

BACHELOR OF SCIENCE – MATHEMATICS

BACHELOR OF SCIENCE – PHYSICS

UNIVERSITY OF MARYLAND – College Park, MD | 2016 – 2020 | GPA: 3.85/4.0

Department of Computer, Mathematical, and Natural Sciences

EXPERIENCE

MATHEMATICAL RESEARCHER

NAVAL RESEARCH LABORATORY | Washington, DC | Jan 2021 - Present

- Research, design, and implement over 14 decentralized optimization algorithms to study theoretical and computational performance
- Stay up to date on latest research on distributed optimization, multi-agent task allocation, and pose graph optimization
- Develop and maintain python environment to efficiently perform numerical experiments

TEACHING FELLOW

UMD PHYSICS DEPARTMENT | College Park, MD | Aug 2019 – Aug 2020

- Led weekly discussion sessions to engage students in lecture concepts
- Held weekly office hours to assist students in solidifying understanding outside of class
- Graded homeworks, quizzes, and tests in timely manner

RESEARCH ASSISTANT

QUANTUM MATERIALS CENTER | College Park, MD | May 2018 – Aug 2019

- Employed flux method to grow varying crystal samples and measured them to observe physical properties
- Presented weekly progress reports of crystal growths to supervisors and peers
- Created and managed secure access database using visual basic containing over 1,000 growth entries

Achievements

Outstanding Winner in the 2019 Mathematical Contest in Modeling

- Named 1 of 17 Outstanding Winners out of over 20,000 international teams
- Used Python to model apex predator population dynamics problem
- Delivered 23 Page report in 4 day time frame

Meritorious Winner in the 2019 SIMOIDE Modeling Challenge

American Mathematical Society Award for Mathematical Achievement

Specialties

Mathematical Modeling Data Analysis

Decentralized Optimization

Nonlinear Optimization

Combinatorial Optimization

Operations Research Data Visualization

Programming

Python Matlab R SQL Git

Scikit Learn MPI Pandas

Leadership Experience

Maryland Media Board of Directors Member

- Review and approve budget consisting of over \$100,000 for academic year of operations
- Establish a strategic outlook for future success of company, notably transitioning to online only platform operations

Vice President of Sigma Alpha Mu

- Won the Presidents Cup, our university's most prestigious greek life award, for time on council
- Awarded Innovative Risk Management Award at international convention
- Oversaw 13 committees as head of internal affairs including philanthropy, community service, academics, and housing committees

References available upon request