Andrew Kerr

B.S. Computational Physics & B.Mus. Percussion Performance kerrand@protonmail.com | (734) 834-9161 | andkerr.github.io

PROFILE =

- Highly dependable student with 5 years of experience developing quantitative and research skills
- Organized and efficient, working 10-15 hours/week on-campus while studying full-time since Fall 2019

EDUCATION =

UNIVERSITY OF MICHIGAN

September 2018 - Present

BS Physics & BMus Percussion Performance

- 3.9 / 4.0 GPA
- Coursework: Programming and Data Structures, Computational Physics, Differential Equations, Multivariable Calculus, Math Methods of Theoretical Physics, Physics Labs

EXPERIENCE =

RESEARCH ASSISTANT

April 2021 - Present

Glotzer Research Group, U of M College of Engineering

- Contribute code updates, bug fixes, and new features to molecular simulation data analysis software.
- Implement unit tests to verify the results of existing student-developed software packages.
- Create software demo examples in Jupyter Notebook and update technical documentation.

TRANSIT COACH OPERATOR

September 2020 - March 2021

U of M Logistics, Transportation & Parking

- Operate campus "Blue Buses" on various inter- and intra-campus routes.
- Provide safe, timely service and campus information to U of M students, staff, and faculty.
- Maintain detailed logs of driving metrics, including passenger counts, miles travelled, and departure and arrival times.

PHYSICS LEARNING ASSISTANT

September 2019 - December 2019

U of M Department of Physics

- Aid students in understanding Introductory Physics course content as it is presented in real-time.
- Answer students' questions thoughtfully and concisely, in order to facilitate group work assignments.
- Maintain a strong command of introductory mechanics concepts and problem-solving strategies.

SKILLS -

- Programming Languages: Python, C/C++, HTML, CSS, JavaScript, Bash, Markdown, LaTeX
- Technologies & Frameworks: Django, SQL Databases, Numpy, Matplotlib, VS Code, Git
- Technical Skills: Scientific Programming, Basic Data Analysis, Data Visualization

ADDITIONAL =

- Martingrove CI Volunteer Nutrition Program Co-President
- Member of the 2017 National Youth Orchestra of Canada & Edges of Canada Concert Tour
- Member of the University of Michigan Symphony Orchestra and Symphony Band
- 3 years experience as a CSIA-certified ski instructor