Kaleb Ducharme

Student

21 Copper Ln, Rochester, NH 03868

(603) 948 5346 | Kaleb.ducharme@unh.edu | Kale-23

Research Interests

My major has allowed me to take classes ranging from psychology to biology to computer science. I want to take the knowledge I have gained from these classes, along with research and lab experiences to advance my knowledge further. I believe my favorite classes in biology and computer science have lead me to find bioinformatics, genomics, and similar research areas that are exactly what I want to study in the future.

Education

University of New Hampshire *Durham, New Hampshire*

Bachelor of Science, Neuroscience and Behavior -Current GPA: 3.97 *Expected May 2023*

- Relevant Coursework: Biostatistics, General Chemistry, Organic Chemistry, Biochemistry, Principles of Genetics, Human Genetics, Intro to Computer Science (Python and Java), Data Science for Life Sciences (in progress), Endocrinology (in progress)

Awards

Presidential Scholarship *2019-2022*

University of New Hampshire *$5,000/year*

Research Experience

Affect, Cognition, & Computation Lab

Independent Studyt Spring Semester 2022
Advisor: Dr. Caitlyn Mills
Ran participants through virtual reality experiments to assess various paradigms of mind wandering. Cleaned the raw data output of the eye-tracking hardware and survey software using Python and R. Analyzed the cleaned data using R and presented initial results.

Visiual Perception Lab

Volunteer Research Assistant Fall Semester 2022 - Present
Advisor: Dr. Omer Daglar Tanrikulu
Currently working with python and the vizard software (python based VR development tool) to create an experiment to study ensemble perception in the visual field. Planning on starting data collection after winter break and hopefully attending a conference at the end of next semester.

Presentations

Bauer, W., **Ducharme, K.**, Hall, A., Priest, J., Wittemann, A., Wong, A., Smith, S., & Caitlyn, M. (2022, April). *Freely moving thought's relationship with testing ability*. Poster presented at undergraduate research conference, university of new hampshire.

Technical Skills

Computational

Knowledge in Python, Java, and R, Microsoft Suite

Wet Lab

Spectrophotometry, Recombinant protein expression in *E. coli*, Benchling for virtual plasmid digestions, Purification of target protein using AKTA start chromatography system (Affinity, gel filtration), SDS-Page, Analysis of active sites of proteins in Chimera