Dakota Scott

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Work / Research Experience

James Madison University CS Department   Teacher's Assistants Program (Fall 2020 – Spring 2023)
Lead Teaching Assistant   Harrisonburg, VA

- Managed Student-TA relationships both within the computer lab in assistance during lab hours, as well as communicating issues to superiors during weekly briefs
- Assisted newer students in completing projects and learning to write and debug programs
- Lead review sessions for CS227: Discrete Structures in order for students to review material or clarify subjects that were unclear in class

JMU Summer Research   Computational Protein Folding using Machine Learning (June. 2021 – August. 2022)
Student Research Assistant   JMU Campus

- Developed Python files to calculate optimal Hyperparameter Values for MILStroud software
- Streamlined Workflow by managing interactions between produced code
- Learned to write bash scripts in order to link executions of Python, C, and Java files

Relevant Job Skills

- **Bilingual**: Fluent in both English and French
- **Programming Languages**: C, Java, Python, Haskell, TeX
- **Prior experience using**: Trello, AlphaFold, GitHub, MILStroud

Projects

Protein Database Entry GMX Clustering

- Developed several Machine Learning Models to cluster protein structure representations (PDB Files) as well as the underlying protein sequence representations
- Mathematically assessed likelihoods of variations in the SARS-CoV-2 (Covid-19) virus based on previously mentioned clusters of sequence variations

Professional Organizations / Affiliations

Upsilon Pi Epsilon: International Honor Society for the Computing and Information Disciplines

- **UPE Vice President**   Mar. 2021 – Mar. 2022
- **UPE President**   Mar. 2022 – Mar. 2023

Education

James Madison University(Spring 2023)

- B.S. in Computer Science
- Minors in Philosophy, as well as Logic and Reasoning