Angus Read
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EDUCATION

Western Washington University – MS Computer Science   **Sep 2022 – Dec 2023**
- Machine learning research; compressive sensing, tensor completion and analyzing sparse sampling methods.
- Awarded a graduate TA-ship in Fall 2022, Winter 2023, Spring 2023 and Fall 2023.

Western Washington University – BS Computer Science, Minor Mathematics   **Sep 2018 – June 2022**
- Accepted to Computer Science Pre-MS program which entailed taking several core graduate-level courses.
- Elective coursework was centered around Data Visualization, AI, and Mathematics.

PROJECTS

Brain Viewer (Python)   **Sep 2021 – May 2022**
- Developed in a group as my senior project using GitHub for source control: **Link**.
- Interactive UI that visualizes connectome projections between some source point and all other points in the brains of mice resulting in a research paper submitted to IEEE VIS 2022: **Link.**

Various ML Projects (Python)   **Jan 2022 – Dec 2023**
- Derived and implemented models for LASSO, gradient descent, and stochastic gradient descent algorithms.
- Worked on some NLP projects: classifying words as complex/simple, and probabilistic n-gram language modeling/sentence generation.
- Implemented a CNN in PyTorch to classify images as real or fake (AI-generated). Resulted in 99.86% validation accuracy on 15327 samples.
- Recreated experiments from **this paper** which entailed decoding hand location from electrocorticographic signals recorded from the brains of monkeys.

Graduate Research (Python)   **Sep 2022 – Dec 2023**
- Studied the effectiveness of different sampling techniques for tensor completion reconstruction**,** resulting in a research paper accepted to SampTA 2023: **Link**.
- Modeled receptive fields from mice and used those as inspiration for sampling pixels in the context of image reconstruction. This resulted in a research paper, which we intend to submit to a conference or journal.

RELEVANT WORK EXPERIENCE

Western Washington University   **Mar 2022 – Dec 2023**
Teachers Assistant/Grader   *Bellingham, WA*
- Courses: Dynamic Web Pages, Data Structures**,** Database Systems**,** Analysis of Algorithms/Data Structures
- Responsibilities include grading programs, exercises, quizzes, and exams as well as holding weekly labs and office hours.

Exa Data and Mapping   **Mar 2022**
Freelance Programming Support   *Bellingham, WA*
- Developed scripts in Python to convert data tables to formats that could be readily imported to other software for summary, graphical display, and statistical analysis.

SKILLS

Python   Java   Linux   Git   Scikit-learn   NumPy   PyTorch   Matplotlib