Shawn Strausser

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WORK EXPERIENCE

Self Employed   **Feb. 2023 – Present**
Machine Learning Engineer   *Detroit, Mi*

- Collected and analyzed a dataset of 15M poker hands, providing data-driven decision-making processes to clients, increasing profit over 300% in the first year.
    - o Fit a machine learning pipeline, frome feature engineering and selection to model selection and validation, that learned to classify the top 10% of players, providing insights on successful strategies.
    - o Implemented clustering techniques (including semi-supervised) that successfully categorized players into winners and losers.
    - o Identified outliers using isolation forests, revealing common traits that lead to significant success or failure.

EDUCATION

University of California - Irvine   **September, 2022**
Ph.D., Biophysics   *Irvine, Ca*

- Performed research on the biophysical mechanisms responsible for magnetic sensing in European Robins, discovering optimal conditions for a cryptochrome based compass compass
    - o Presented research at The Royal Institute of Navigation conference on animal navigation hosted in London.
    - o Held office hours, answering questions and providing academic guidance, particularly to first-generation students.
    - o Used genetic based algorithms to optimize the performance of the compass
    - o Solved Shrödingers equation, a set of 64 coupled partial-differential equations using Fortran/Lapack on a high performance computing cluster via openMPI

University of Michigan, Ann Arbor   **September, 2014**
BS, Mathematics   *Ann Arbor, Mi*

- Member of professional engineering society Theta Tau and Society of Physics students
- Recipient of Devlin scholarship for outstanding academic performance and volunteer work.

SKILLS & INTERESTS

- **Skills** *TensorFlow, High Performance Computing (Fortran/Lapack, OpenMPI, CUDA, IntelMKL), PostSQL*
- **Interests** *running, chess, poker, stock market and real estate investing*