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. This unstructured dataset is characterized by noisy features/labels and severe class imbalance.
- For this make all of this present tense if it is ongoing
    - Led the data collection process and feature engineering to improve machine learning models, identifying scenarios where more data was needed and what to collect. (change the tense reword this section)
    - Fit machine learning pipelines, from feature extraction and selection to model selection and validation, that learned to classify the top 10% of players, providing insights on which features were important for successful strategies.
    - Model and predict player behavior using clustering techniques and convolutional neural networks.
    - Identified outliers, revealing common traits that lead to significant success or failure. (this is more of a responsibility than an accomplishment – rephrase so that it highlights the impact)

EDUCATION

University of California - Irvine **September, 2022**

Ph.D., Biophysics *Irvine, CA*

- Studied the molecule cryptochrome and its role in magnetic sensing in biology. Combined biochemical reaction models with quantum physics to develop a model capable of explaining experimental results.
    - Presented research at The Royal Institute of Navigation conference on animal navigation hosted in London.
    - Held office hours, answering questions and providing academic guidance, particularly to first-generation students.
    - Used genetic based algorithms to optimize the performance of the compass (don't use the word used, it is considered a filler word)
    - Solved Shrödingers equation, a set of 64 coupled partial-differential equations using Fortran/Lapack on a high performance computing cluster via openMPI/CUDA.

University of Michigan, Ann Arbor **September, 2014**

BS, Mathematics *Ann Arbor, MI*

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

SKILLS & INTERESTS

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