Raymon Shi

Philadelphia, PA | 267-270-7621 | rshi.raymon@gmail.com | https://github.com/raymon-shi

Education

University of Pennsylvania, Magna Cum Laude	**Philadelphia, PA**
Bachelors of Arts in Cognitive Science and Computer Science, Minor in Linguistics	May 2022

Cumulative GPA: 3.61/4.00

Work Experience

Children's Hospital of Philadelphia, Research Assistant — Jan 2021 - Present
- Spearheaded a project to introduce a modern approach of analyzing social interaction data using DeepLabCut
- Developed an automated process for analyzing convoluted touchscreen data with the usage of Python, Pandas, and Tkinter
- Investigate the effects of ketamine on pattern separation and cognition in CSDS-affected mice by conducting 6 months of touchscreen experiments, 10 days of CSDS tests, and 4 days of SI tests

The Wharton School, Student IT Specialist — Jun 2018 - Jan 2021
- Assisted students with technological problems including account, software, and hardware issues
- Provided one-on-one sessions on configuring computers and detailing technological resources for over 150 students

Projects

Miniature Facebook — Nov 2021 - Dec 2021
- Developed a website featuring account creation and login, walls, posts, group chats, and news feeds
- Implemented a news recommendation system by using a label propagation algorithm with Apache Spark
- Created a news search engine with DynamoDB to store an inverted index containing keyword-article pairs

Billboard Hot-100 Song Predictor — Nov 2021 - Dec 2021
- Used Spotify API and NTLK's Sentiment Analyzer to gather song features and polarity scores for machine learning
- Constructed a deep neural network to predict the classification of a song based on all acquired features

DeepLabCut Social Interaction Application — Aug 2021 - Dec 2021
- Deployed a deep learning model to accurately track body parts on mice during social interaction
- Developed an application to consolidate raw data into empirical results
- Applied color and contour detection to perform real-time video analysis of social interaction test

Rodent Touchscreen Data Analysis Application — Jun 2021 - Aug 2021
- Python application using Pandas and Tkinter to automate data wrangling of experimental results
- Cleans and processes raw data files to produce an organized CSV file for statistical analysis
- Reduces overall time required to process data from weeks to minutes

Computational Lyric Analysis On Rapper Quadeca — Apr 2021 - May 2021
- Extracted lyrical content from Genius.com using LyricsGenius Python Client
- Utilized natural language processing techniques such as n-grams, keyness analysis, KWIC analysis, and sentiment analysis to analyze the lyrical content of Quadeca's music during his rise in popularity

Skills

Technical: Python, Java, Javascript, C, C++, HTML, CSS, Ruby on Rails, SQL, Apache Spark
Other: Adobe Suite, Film Production, Film Editing