Project Idea:

* A better keyboard layout
* QWERTY was created over 100 years ago
* Could a genetic algorithm create an optimized keyboard that
  + Limits moving hands off of the home row
  + Reduce the number of items that your ring finger/pinky has to make keystrokes

Data set:

* Spacy NLP datasets
  + Ex. Reuters dataset

Examples in practice:

* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6946161/>
* <https://www.youtube.com/watch?v=EOaPb9wrgDY>

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Project Idea:

* An AI to submit guesses for the GeoGuesser game
* We would take a basket of images from google maps and use them for training/testing where we are in the world
* Probably keep at a high level and just do a country classification

Data set:

* <https://www.kaggle.com/datasets/ubitquitin/geolocation-geoguessr-images-50k>

Examples in practice:

* <https://github.com/Stelath/geoguessr-ai>

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Project Idea:

* Model to predict if a car will be collectible or rise in value over time
* Model to predict if a watch will be collectible or rise in value over time
  + I.e., “batman Rolex” or “Pepsi Rolex” … both of which are super collectible now
  + <https://www.chrono24.com/rolex/ref-116710blnr.htm>
  + <https://www.chrono24.com/rolex/pepsi--imod2757.htm>

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Project Idea:

* With covid, many workout classes went online. It’s great people can work out from anywhere, but without coach/trainer corrections, people may injure themselves doing exercises incorrectly
* Model to correct people while working out, as a coach would
* A lot of exercises would be out of the scope of the project so we could focus on one exercise such as plank

Data set:

* <https://www.kaggle.com/datasets/niharika41298/yoga-poses-dataset>

Examples in practice:

* <https://arxiv.org/pdf/1911.07935.pdf>
* <https://www.jefit.com/exercises/631/Plank>

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Sai

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Project Idea:

* Posture classification
* With the rise of virtual meetings and classes, there’s a need for posture correctness

Data set:

* <https://ieee-dataport.org/open-access/silhouettes-human-posture-recognition>

Examples in practice:

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Project Idea:

* Music genre classification

Data set:

* <https://www.tensorflow.org/datasets/catalog/gtzan>

Examples in practice:

* <http://marsyas.info/downloads/datasets.html>

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Project idea:

* Health of plants and leaves in Pittsburgh/different cities

Data set:

* <https://www.tensorflow.org/datasets/catalog/plant_village>

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Project idea:

* Restaurant application approval prediction

Data set:

* <https://data.cityofnewyork.us/Transportation/Open-Restaurant-Applications/pitm-atqc>

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Project idea:

* Rent estimation system for NYC
* Based on neighborhood financial health and property data, can we accurately predict listing prices?
* Merge Redfin MLS data with New York city data such as development recency and financial health of neighborhoods
* Maybe even create a property scoring system?
* Crime breakdown / government spending breakdown / gentrification / other
  + Perhaps other booming metro areas (Austin / LA / Seattle)
* Tells you when to maximize profit
  + Economic forecasts from federal reserve

Multiple data sets:

* <https://data.cityofnewyork.us/Housing-Development/NYCHA-Development-Data-Book/evjd-dqpz>
* <https://data.cityofnewyork.us/Business/Neighborhood-Financial-Health-Digital-Mapping-and-/r3dx-pew9>
* Redfin.com

Dataset search sources:

<https://data.world/>

<https://data.cityofnewyork.us/>

<https://www.tensorflow.org/datasets/>