Hackathon ideas (Think impact, trends, future, perhaps financial value, even start-up value? But with 24 hours or less, make an MVP (minimum viable product))

* Financial scamming comments detector
  + Can go ccn route, chatgpt route, algorithmic route, youtube api
  + Maybe need training, validation sets
  + Live demos?
  + Is integration ready? Protobuf grpc compatible?
  + Maybe also target different financial scams on youtube
  + Next step is all social media platforms
  + ML vs Algorithmic methods
* Microserivec architecture - Python grpc services (learn grpc.py library)
* Youtube api scrapper to find scammy comments (learn how to implement API)
* LLM solution - try to train or something (understand NN’s)
  + [Neural Network Python | How to make a Neural Network in Python | Python Tutorial | Edureka (youtube.com)](https://www.youtube.com/watch?v=9UBqkUJVP4g)
  + Low level: input/output/hidden layers, decision matrix, links/synapses(weights), error/cost, neuron/node bias, updating weights (feedforward + backpropagation)
  + High level: training data, multi-dimensional data
* Could nice design website that can display results of the detector (another sell to people, next.js react.js chadcn, tailwind.css, appwrite)
* Implement LLM fine tuner (learn about tuning parameters for NN)
  + Feature selection:
  + Weights:
* Implement GUI or website (learn about Python GUIs)
* (Possible) Backend: ChatGPT that BS. Learn how SWE’s implement GPT
* Learn virtual environments in Python

Relate ML projects:

* AI medical scribe to decode doctor scribbles
* Profile copying scam prevention? Detection?
* Elder fraud?...nah, rip - old people
  + Hack indian ppl
* Fake news detector?
  + Back track stuff?
  + Difficult to find training and validation sets
  + Could use ryan macbeth github algo to find original img?
* Class Schedule
  + Classes are filled up
  + Spots opening up in classes you need but they’re at unknown times making it hard grab seats
  + Creating a solution that will automatically register for classes for you when someone drops a course you need
* Khagn wanna make bomb drone on god **(on god)**
  + DJI Drone flight log data into GUI
    - I dunno maybe dji stuff into wintak?
    - Automate drone controls?
  + DJI Drone with vision/object detection on a border and transmit detections on a gui?
    - Drone camera has object classification/identification algo which determines if it blows up or not
    - Detected object could determine automated control inputs
  + Mobile drone modem for hacking noobs.
    - Tap into transmit signals for hacking wifi routers, most of the work done on the data processing software side.
  + Collision detection in drones
* Connecting future messages of BSM to maybe other useful things
* Smart shoes lol
  + Pressure sensors at different parts under the shoes.
  + Data processing + pressure correlations based on age, height, weight, sex, foot size, ethnicity, skin color **(black)**
* Ultrawave haptics in medical hand-guided based training
  + Context: some medical procedures (i.e. needle insertion) requires immense precision and is hard to replicate in a training environment because..
    - a.) you practice on a dummy which is nothing like the real thing
    - B.) you need a supervisor to guide your hand while practicing on a dummy - not realistic at all
    - c.) you practice on a real person – dangerous
  + Can serve as a step between b and c
  + 10/5: Need to get haptic transmitter for interfacing
* VR CPR simulator
  + Use of ultrawave haptics or tactile gloves to provide signal for compressions
    - Pressure determines signal level output, data processing of these signals to see how effective CPR was performed based on body type.
  + VR application using unity to walk through scenario

Interesting sites:

<https://universe.roboflow.com/> (huge specialized CV repos)

<https://github.com/roboflow/dji-aerial-georeferencing> (cool DJI drone geo referencing)

<https://protobuf.dev/> (nice serialization standard)

<https://telcomatraining.com/what-is-bsm-basic-safety-messages/> (car to car safety message?)

<https://catalog.data.gov/dataset/tampa-cv-pilot-basic-safety-message-bsm-sample> (sample msg gen?)

<https://docs.google.com/document/d/1BkulCmFJSONV-oHrhWZCkztvDZ6rcHUoiNaQ1Gs4Zuw/edit?usp=sharing> (VR ideas)