

Ideas for a graduation project

1- Recommendation System for Social Media Posts (via Chrome Extension)

Concept:

A Chrome extension that recommends or ranks social media posts (e.g., tweets, Facebook posts, or LinkedIn updates) based on user interests, engagement behavior, or sentiment.

Core Components:

- **Data Collection:** Capture posts, user interactions (likes, comments, time spent), and metadata.
- **Recommendation Engine:**
 - Collaborative filtering (based on user similarity)
 - Content-based filtering (based on post embeddings)
 - Hybrid model (both)
- **Extension Interface:** Ranks or highlights recommended posts directly on the web page.
- **Optional:** Feedback loop to improve personalization.

2- Action Recognition from Live Video Streams

Concept:

Detect and classify actions or events (e.g., baby crying, person leaving room, car entering area, object breaking) from a live camera feed in real time.

Core Components:

- **Video Frame Processing:** Real-time video capture.
- **Event Logic:** Combine detections into actionable insights (e.g., “baby crying while no adult detected”).
- **Dashboard/Alerts:** Real-time monitoring UI or notifications.

<https://www.kaggle.com/code/faridtaghiyev/video-action-recognition-ucf101>