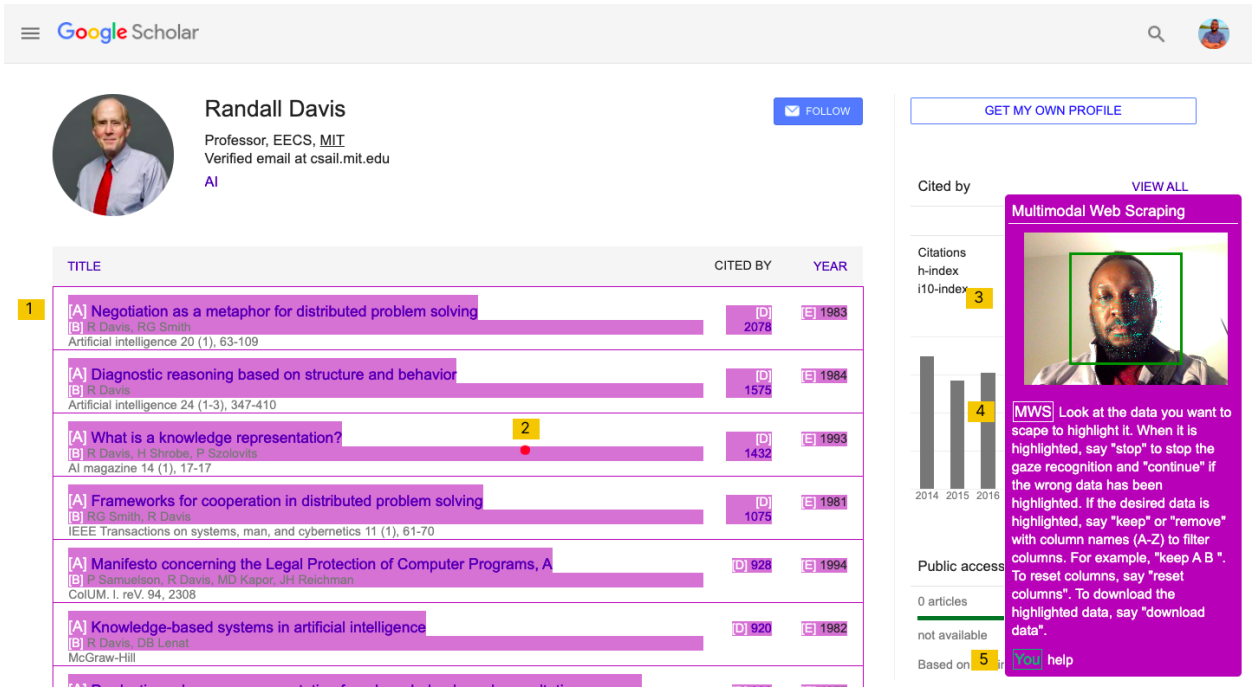
MWS: Multimodal Web Scraping



Overview of how MWS can be used to scrape data from a website: 1) Highlighted website data corresponding to the scraped data table, 2) red circle which represents the user's detected gaze, 3) webcam feed showing how user's gaze is being detected, 4) MWS feedback dialog (also uttered via speech synthesis) used to respond to user commands and guide user actions, 5) user feedback dialog used to display what voice command was detected by the system

MWS is a Chrome browser extension that enables web scraping via gaze detection and voice commands in a few simple steps. Once initiated on a website, MWS detects the point on the website where the user is looking, through their webcam feed, and continuously determines and highlights the data table that that point belongs to. When the desired data table is highlighted, a user can use voice commands to stop the gaze detection and save the highlighted data table, filter which of the data table's columns to keep or remove and download the data table as a JSON file.

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Paper: https://github.com/Kapaya/multimodal-web-scraping/blob/main/paper.pdf

Demo: https://youtu.be/Ee34bGjcYgU