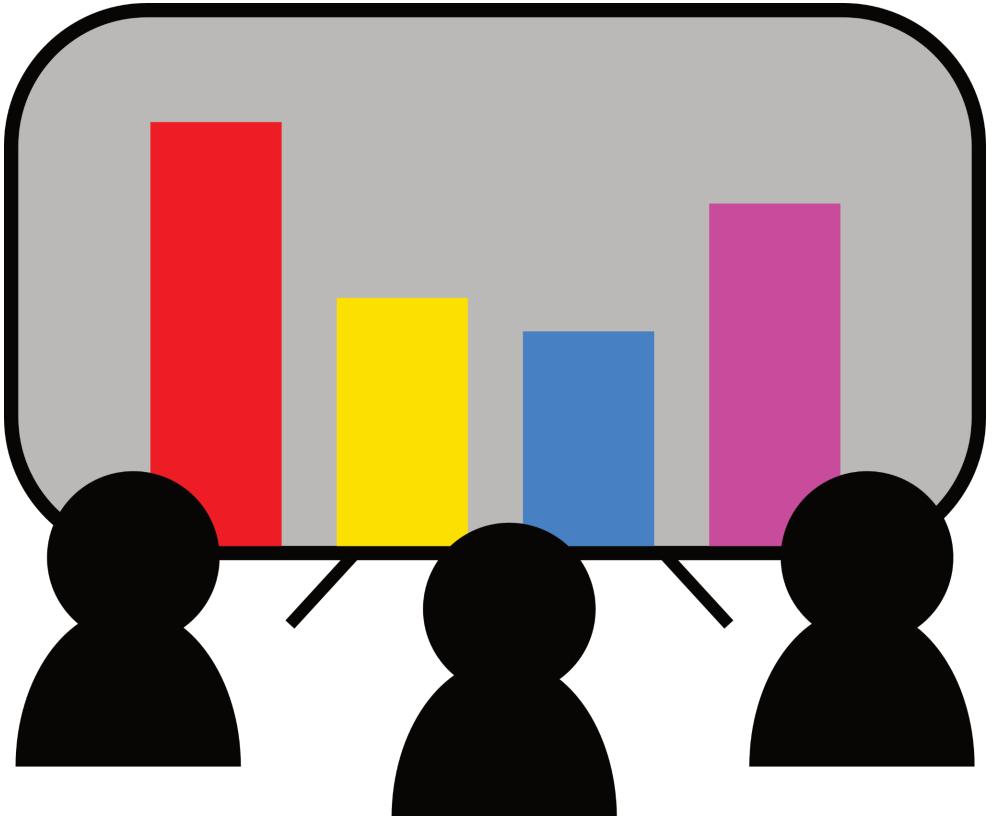
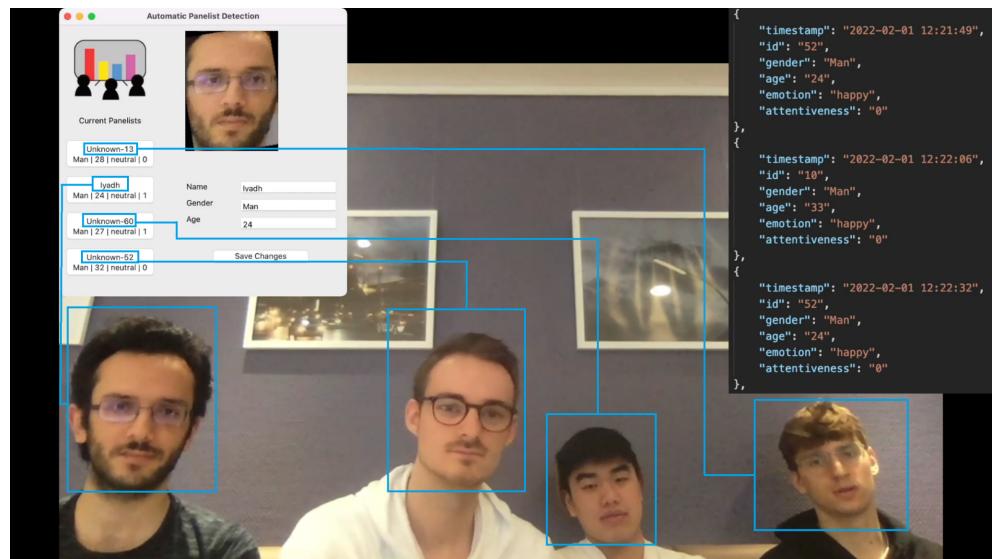
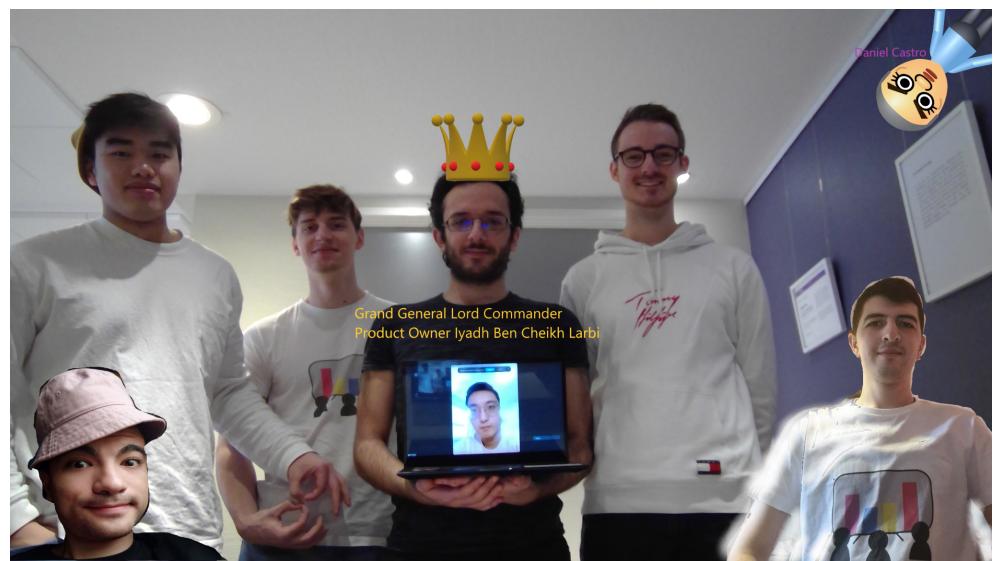


Project name	Automatic Panelist Detection
Project mission	The goal of this project is to create a cheap yet efficient device to optimize television audience measurement. This will be achieved by automatically detecting and recognizing panelists using pre-trained computer vision models and an RGB and infrared camera. All household panelists can be registered in a local database to facilitate the recognition process. Alongside gender and age, attentiveness and emotions will also be assessed. To account for user privacy, the gathered data is anonymized and sent to a GfK server. The device is not only non-intrusive but also time and power-efficient. It should also work under difficult lighting conditions.
Industry partner	Growth from Knowledge
Team logo	
Project summary	<p>The outcome of this project is a software that can be uploaded on a (cheap) single-board computer to perform automatic television audience measurement efficiently.</p> <p>Installed next to a TV, the device captures frames and can detect and recognize faces along with their respective gender, age, emotion, and attentiveness.</p> <p>Using these components means that our software can recognize which panelists belong to the household and log their tv watching behavior for further analysis.</p> <p>The panelists can interact with the device through a graphical user interface to update their information. Furthermore, the device is non-intrusive, preserves privacy, and only sends the necessary data to the server (no photos or other personal information).</p>

Project illustration



Team photo



Project repository

<https://github.com/amosproj/amos2021ws04-auto-panelist-detection>

Additional information

Any additional information you would like to provide (optional)