

Heart Rate from Video

Task:

Extract the heart rate from the person in [codingtest.mov](#) using Kotlin, C++, or Swift and any packages you like.

Recommended path:

1. Average the pixels over a portion of the forehead for the green channel vs. time (the heart rate is strongest in the green channel).
2. Perform a Fourier analysis on the green channel signal vs. time to extract the heart rate.
 - Look for the peak in the PSD within a reasonable heart-rate range
 - Ignore other prominent peaks outside of physiological ranges.

Deliverables:

- A small project or script that prints the estimated BPM.
- A short README with:
 - How to run it
 - The BPM you measured on the clip

Submission:

Reply back to the email with either a GitHub link or a zip of the code + README.

Time Estimate:

This should take about 1 hour.