

Intercoach

Strive school graduation project

Made by **Umut Aktaş**



About me

Background

6 years in mechanical engineering

Dokuz Eylül University

MAN Turkey

- Design engineering
- Lean Production
- Design programming
- Mathematics
- Predicting production failures
- Project management

Skills

Python

Jupyter NB

PyTorch

Tensorflow

Web Scraping

CNN

Computer Vision

NLP

LSTM

SQL

REST API

Docker

Jira

HTML

CSS

Flask

Data
analysis

Data
structures

Feature
engineering

New challenges

- AI engineer
- ML engineer
- Data analyst
- Data scientist
- Business analyst

Intercoach

AI Interviewer

Intercoach helps candidates,
HR specialists and managers

Key features;

- Speech fluency
 - Duration of answer
 - Hesitation
 - Pauses
 - Speed of speech (wpm)
- Facial Emotions
- Positivity of your voice
- Positivity of your word usage

Here are your overall results

AVG. DURATION
OF ANSWER,
SEC

200
LONG

SPEED OF
SPEECH,
WORDS PER MINUTE

300
FAST

HESITATION,
TIMES

2
NORMAL

PAUSES,
TOTAL SEC

3
NORMAL

Facial Emotions



NEUTRAL
25%



HAPPY
25%

**You did a very good job
today!**



Your voice sounds

Negative



Your usage of words shows that you are

Positive



Intercoach helps candidates to prepare for the job interview

How to use:

1. Open the Intercoach
2. Receive typical job interview question
3. Record your answer on the video
4. AI analyses your mimics, tone of voice, speech and word usage
5. Program compares your results with benchmarks
6. Analyze impression that you will give to the interviewer
7. Read tips how to correct yourself



How it works

Video

- Facial expressions

Computer Vision

Open CV

NumPy

Tensorflow

CNN

Open CV

Facial expressions dataset by
Pierre-Luc Carrier and Aaron
Courville

Kaggle

Speech

- Text sentimental analysis
- Answer duration
- Hesitation
- Speed of speech
- Pauses

NLP

IBM
Watson

NLTK

NumPy

Tensorflow

LSTM

CNN

NLTK

IMDB

Kaggle

Twitter

Kaggle

How it works - 2

Audio

- Voice sentimental analysis

Audio classification

librosa

NumPy

Tensorflow

CNN

librosa

The Ryerson Audio-Visual
Database of Emotional Speech
and Song (RAVDESS)

Site

- Template by
- Adjusted with
- Web page / App

Nicepage

HTML

CSS

Flask

Docker

References

- Speed of speech – research of US National Center for Voice and Speech
- Duration of an answer – recommendations by interview coach Jennifer Scupi
- Pauses in speech – research of of Marseille University
- Hesitation – based on pauses data

Umut Aktaş



aktasumut@gmail.com



aktumut



umutaktas



aktumut



umutaktas.herokuapp.com