Age & Gender Classification

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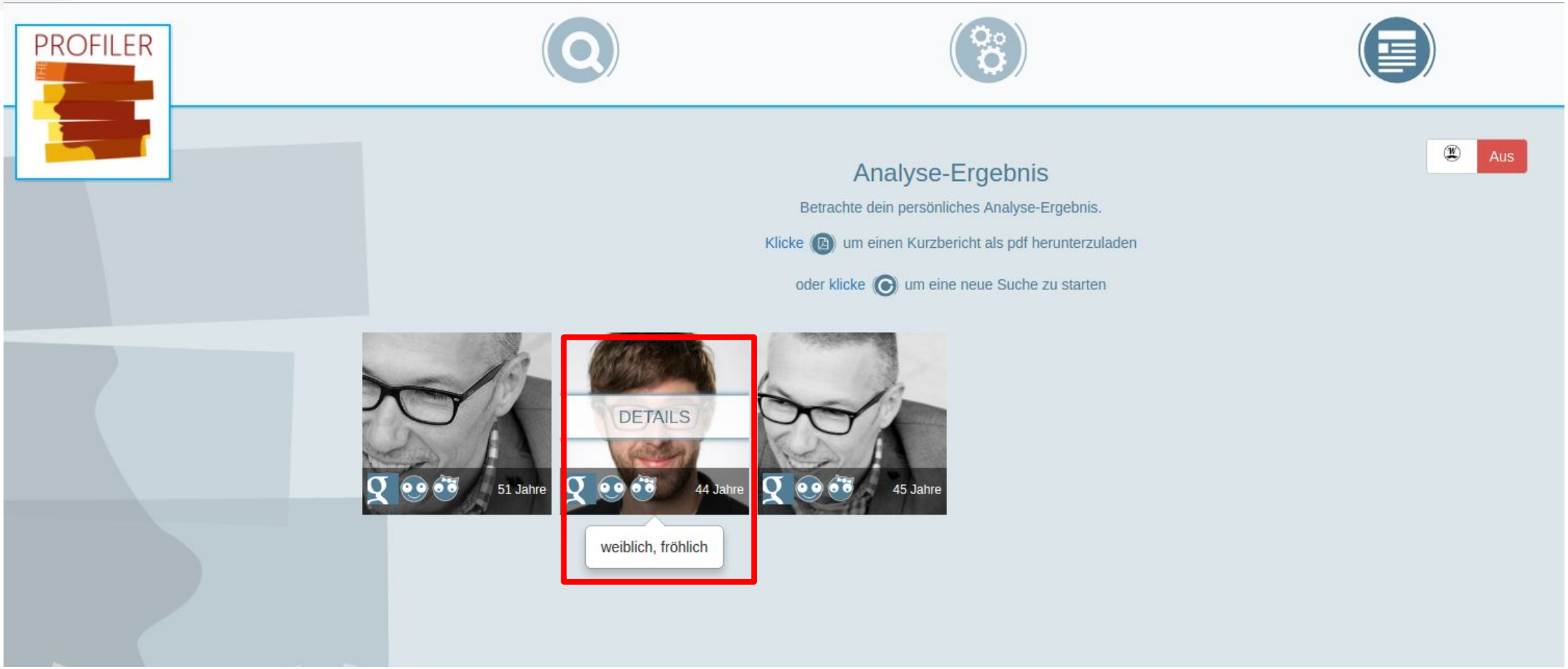
Age- and Gender Classification @ The Profiler



Project Outline

- Age & Gender Classification for *The Profiler*
- Deep Learning (Keras on Theano)
- Age in groups of 10 years

- IMDb & Wiki dataset
- >500,000 annotated face crops available

IMDb & Wiki Dataset

IMDb

460,723 images

Wikipedia

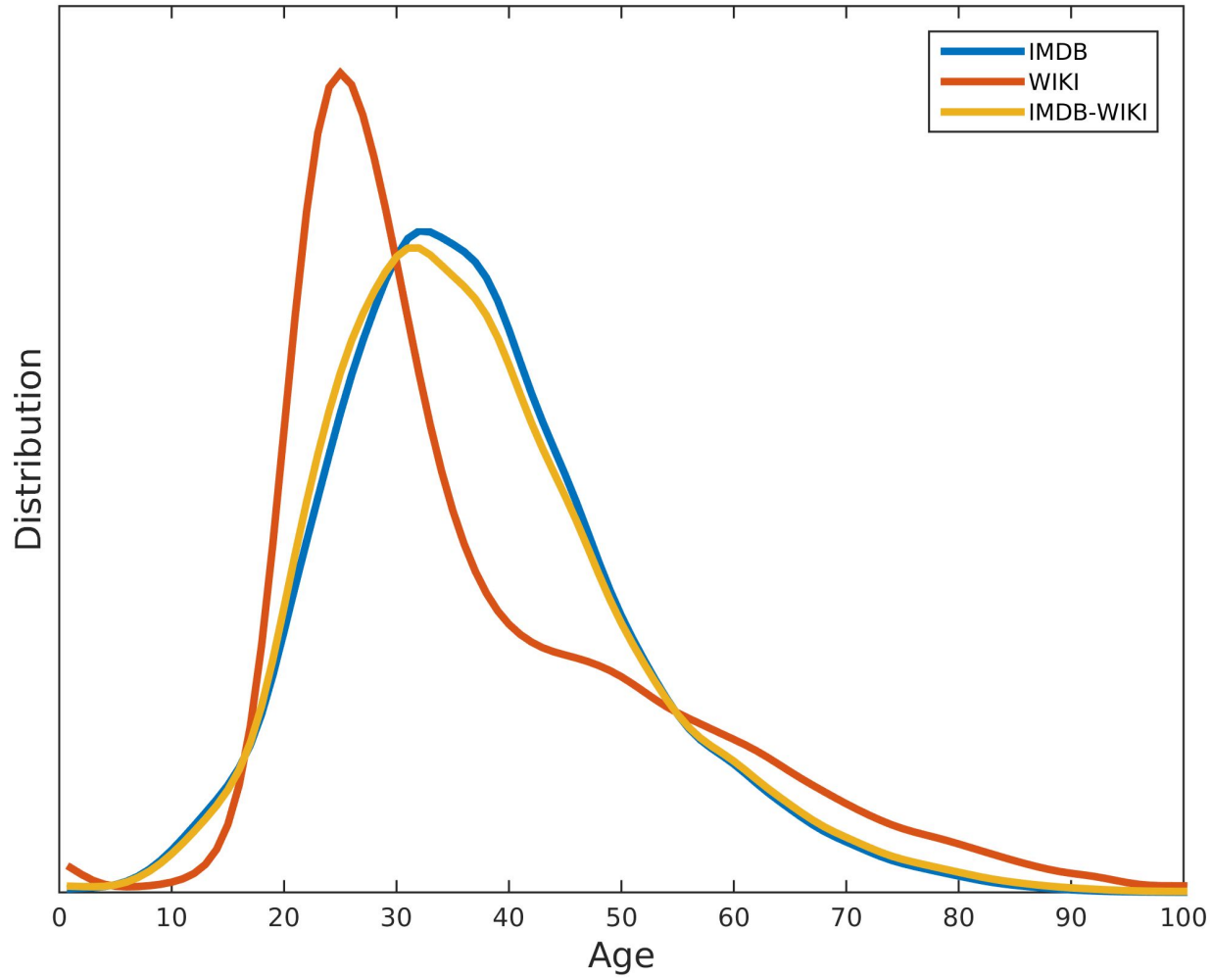
62,328 images

Labels

gender: 0, 1

age: date of birth and photo taken

IMDb & Wiki Dataset - Age Distribution



Solution

- Split data into train, validation and testing sets
- Resize images to fixed dimensions (e.g. 224x242px)
- Deep Learning (Keras on Theano)
  - GoogLeNet model (Best accuracy density)
  - Adam optimization (Adaptive Moment Estimation)
- Ordinal loss for age classes (e.g. weighted kappa)
- Categorical loss for gender classes (e.g. cross-entropy)

Evaluation

- Use the Wiki dataset
- Split data into train, validation and testing sets
- Evaluate the data on the testing set
- Report accuracy, precision and recall

Thank you!

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