

## MOBIO Database

Christopher McCool

**MOBIO Technical Meeting, Sep.15-16, 2009**

**EyePmedia – 1020 Renens**



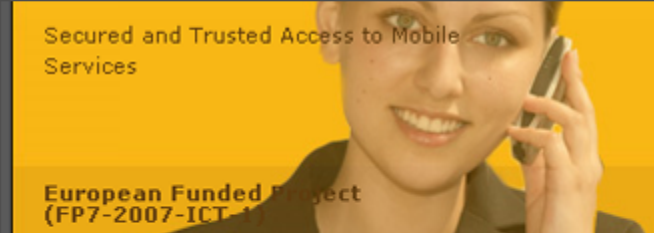
### MOBIO - Mobile Biometry

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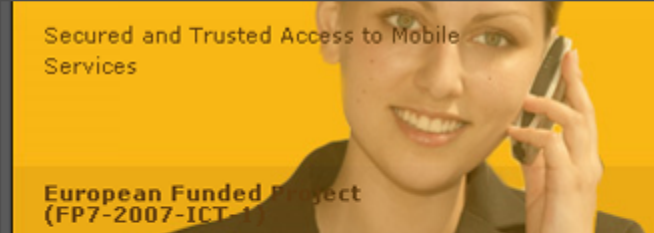
Be on the vibes





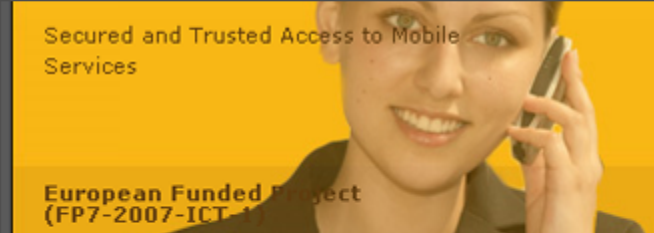
# MOBIO Database

- Phasel
  - Summary
  - How it will be used (ICPR 2010)
  - Protocol: I need your help here
- Phasell
  - Summary
  - Progress to date
- Future Plans
  - Distribution of the database
  - Distributing the protocol
  - The amount of data and processing it all



# Phasel

- Summary
  - Collection for Phasel has been successfully completed
    - Total users: 158
      - » BUT: 33 IDs,
      - » Idiap: 28 IDs
      - » LIA: 24 IDs
      - » UMan: 27 IDs
      - » Unis: 26 IDs
      - » UOulu: 20 IDs
    - Sessions per user
      - » Mobile phone: 6 sessions
      - » Laptop: 1 session (enrollment)
  - Data per user
    - Approximately 30-45 minutes of data per user (guesstimate)



# Phasel

- Plans for Usage
  - ICPR MOBIO Face and Speaker Verification Evaluation
    - Distributing some of the data to participants
    - Developing a simple protocol
      - » Using mobile phone data
    - Provides international coverage

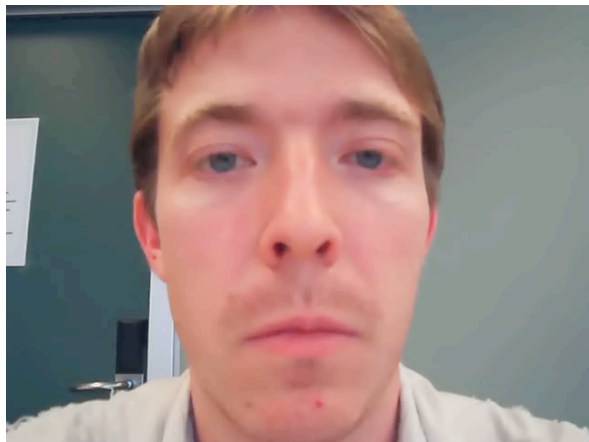


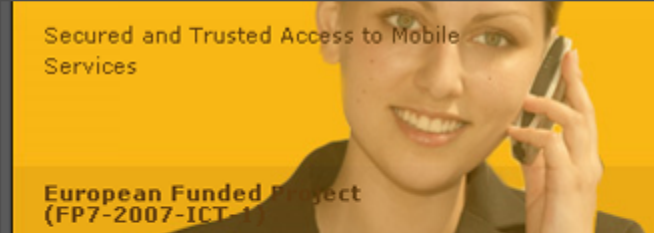
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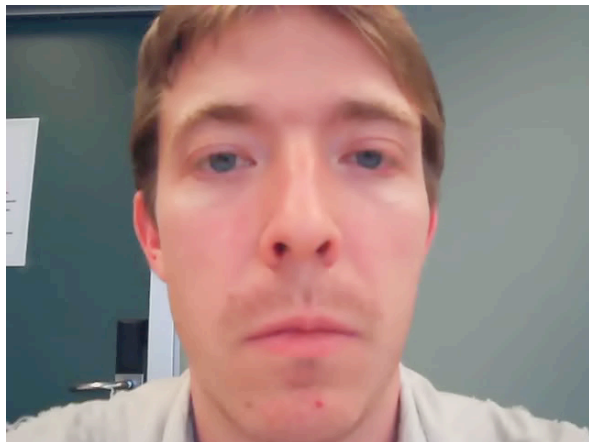
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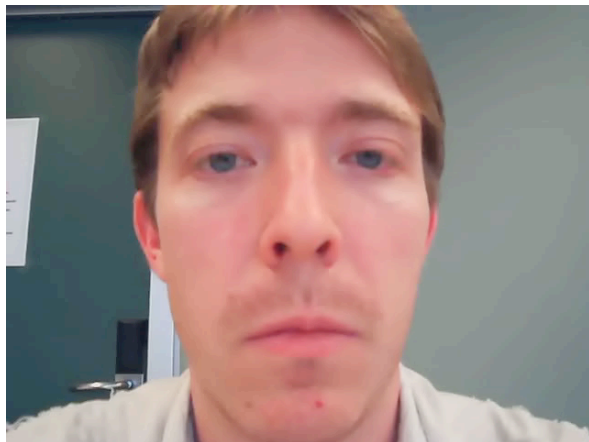
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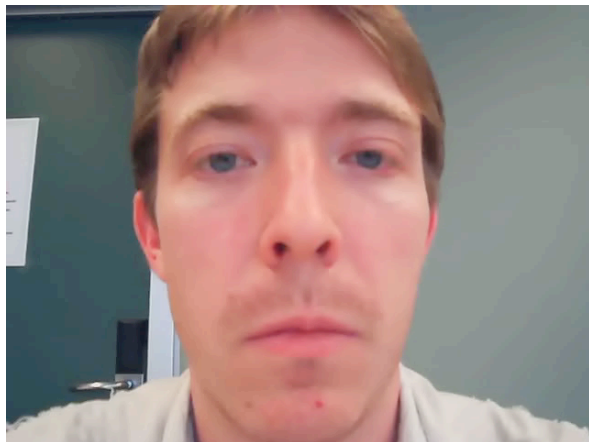


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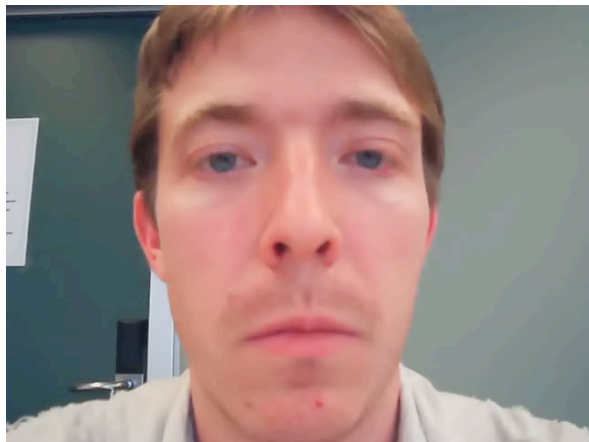
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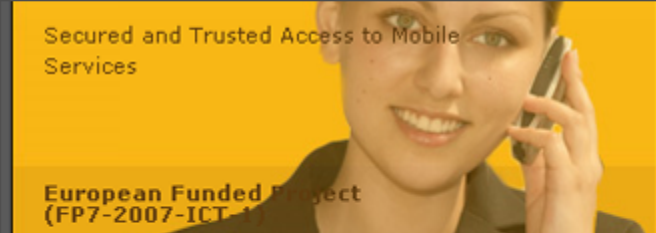
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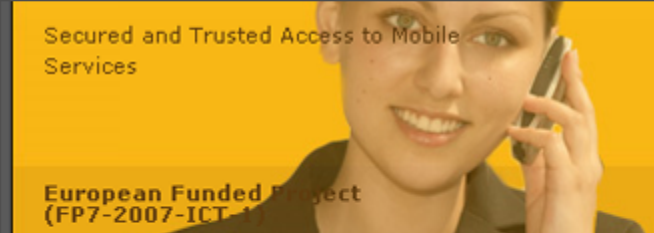
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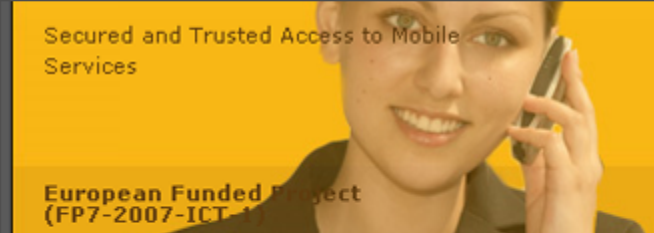
# Phasel

- Assistance Required
  - Speech people for developing a protocol for Phasel
    - Problems:
      - » One microphone sometimes fails (we haven't tracked/annotated this)
    - Sessions per user
      - » Mobile phone: 6 sessions
      - » Laptop: 1 session (enrollment)
    - Multiple conditions:
      - » Enrol using one entire session or only bits and pieces from this one session?
  - Model adaptation protocol
    - How do you want to define this problem?



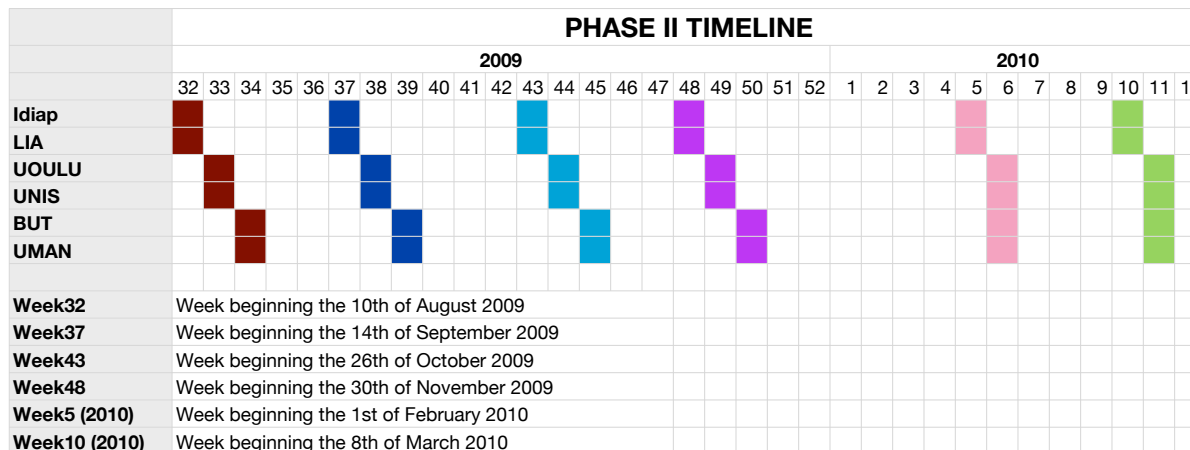
# Phasell

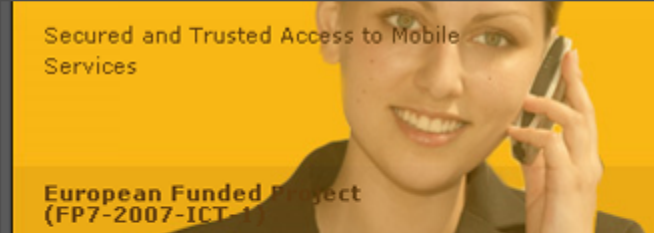
- Summary
  - Second phase of data
    - Provides a longer period of capture
    - More data
      - » In the end approximately 1 hour of data per user
    - Capture in more challenging environments??
      - » Are we really doing this at all?
  - Open the problem of impostor attacks to each site
    - Can we develop several different kinds of attacks on biometric systems?



# Phasell

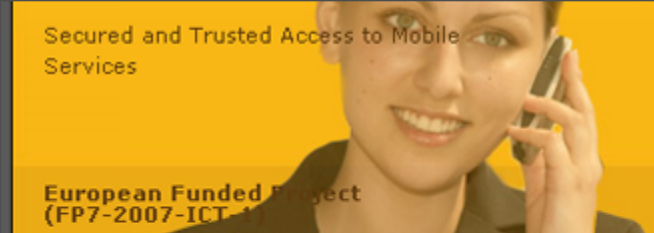
- Progress so far
  - UOULU: 2 sessions (on schedule)
  - LIA: 1.5 sessions (on schedule)
  - Idiap: 1 session (1 week behind for the 2nd session)
  - UMAN: started (behind schedule -- phone problems still)
  - BUT: started (behind schedule)
  - UNIS: started (behind schedule)





# Phasell

- Reminders
  - Please collect the data!
    - Some sites have expressed the first one or two sessions will have a delay, but afterwards we need to be on time
  - Capture environment
    - Please remember to open the windows and/or doors (to add more variable noise)
  - Consider how to do an active impostor attack
    - How would you plan to do this, perhaps each site can develop its own impostor attack



# Future Work

- Distribution
  - ICPR Competition
    - Hear a response 28th September 2009
  - Joint paper on the use of the database
    - One of the first large-scale audio-video face evaluations
    - Informing the scientific community of baseline results
    - Defining a protocol to use
  - Upload samples to website
    - To inform people about the database and how to get it
  - Consider other competitions



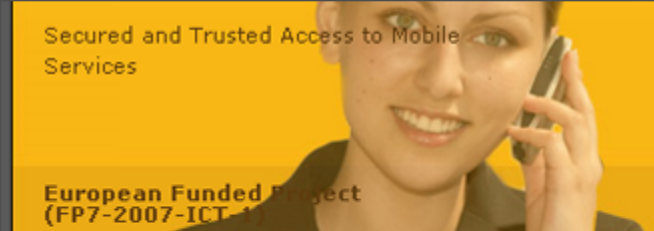


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**Thank you for your attention**



# ICPR Competition

- Video-based face recognition
  - Problems
    - The MOBIO database is big:
      - » Running a baseline is a challenge
    - Reducing the problem
      - » Using just the first five (fixed questions) as the “videos”
  - Is each video file a separate observation
    - Do we score: per video file? per session?



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**Thank you for your attention**