

WEARABLE TIME MACHINE

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MOTIVATION

Humans are constantly burdened with remembering names and details about past social interactions.



Personal Assistants are passé...



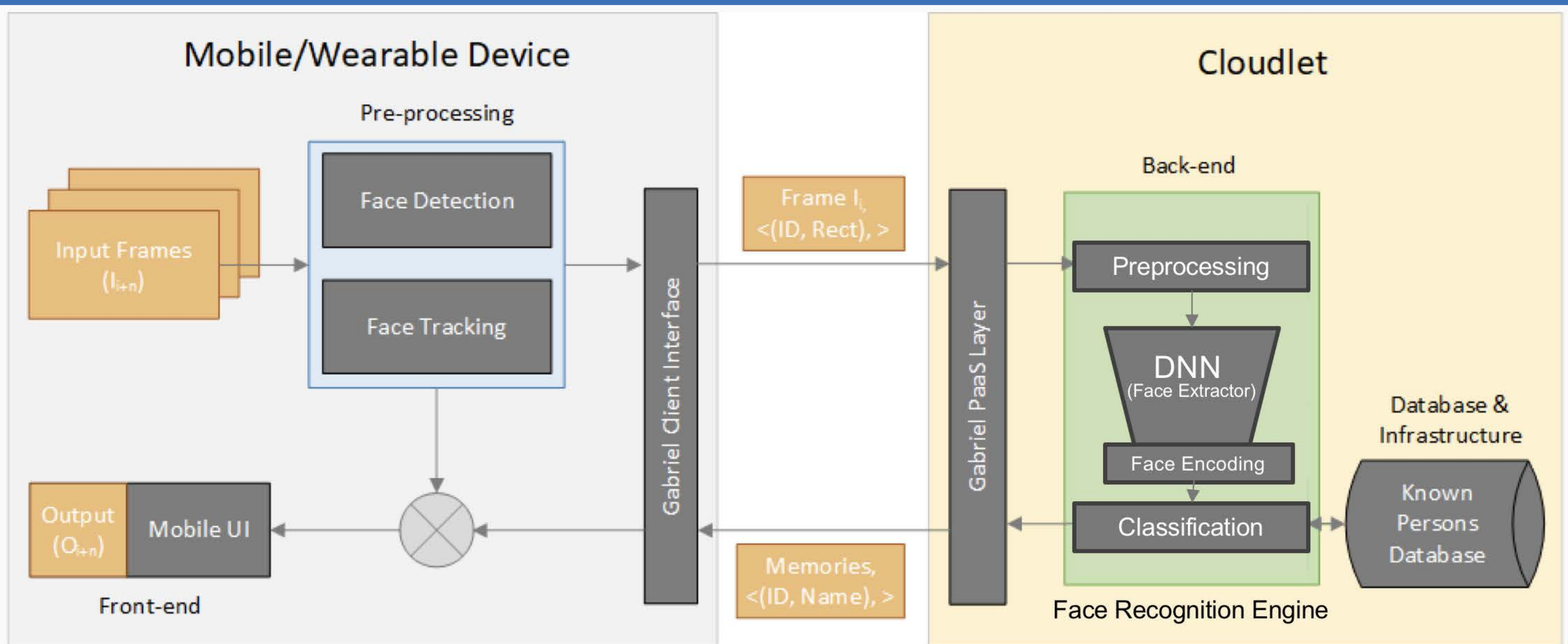
Smart Glasses are the future!

PROJECT OVERVIEW

An Android application to provide intelligent cues in a social setting. Objectives:

- Display an identified person's **name, interests, and details of the most recent interaction**
- Automatically determine whether an unknown person is **important** to the user
- Impose **minimal cognitive overhead**
- Be user-specific, but **device-agnostic**

SYSTEM ARCHITECTURE

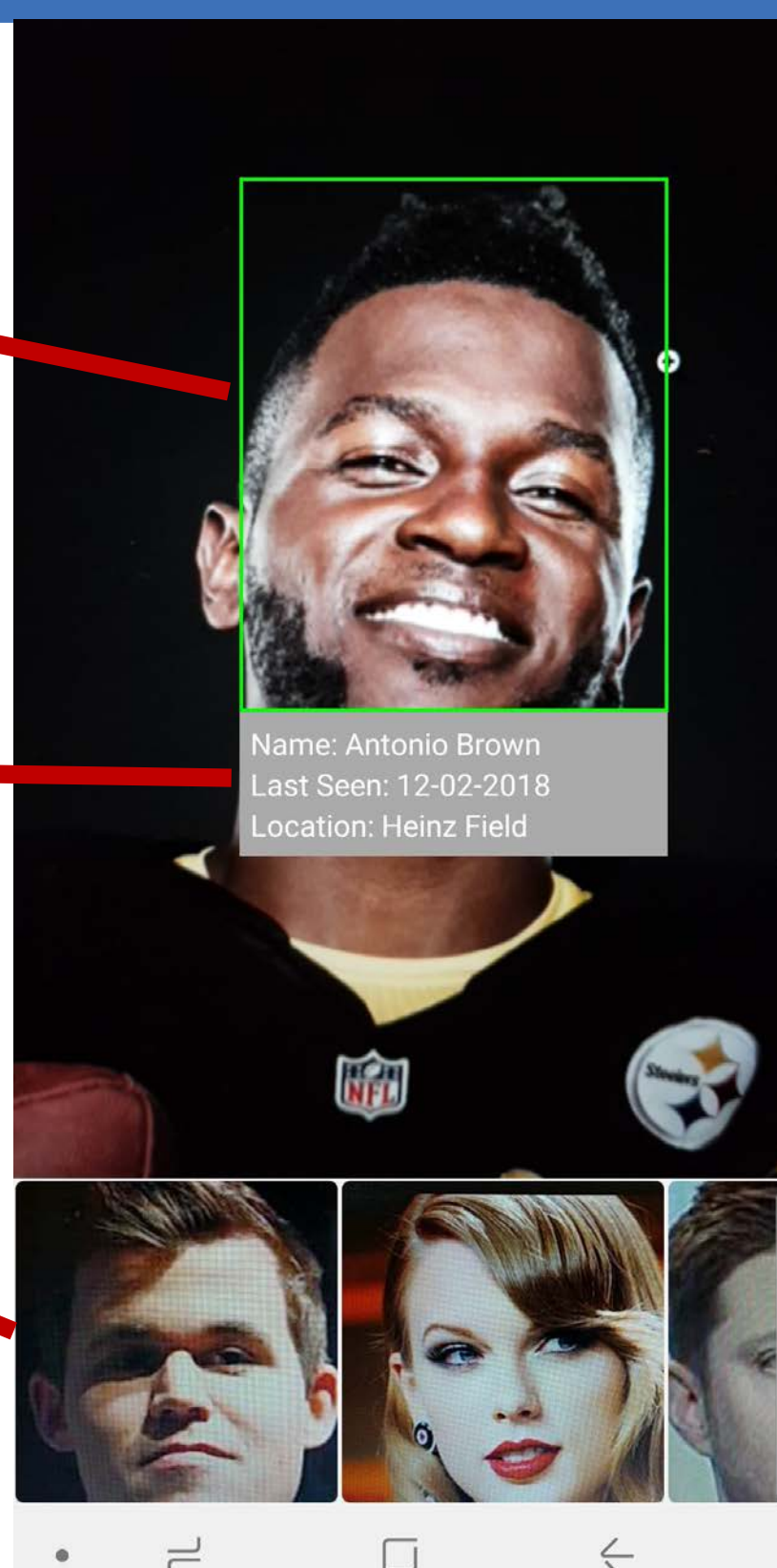


FEATURES

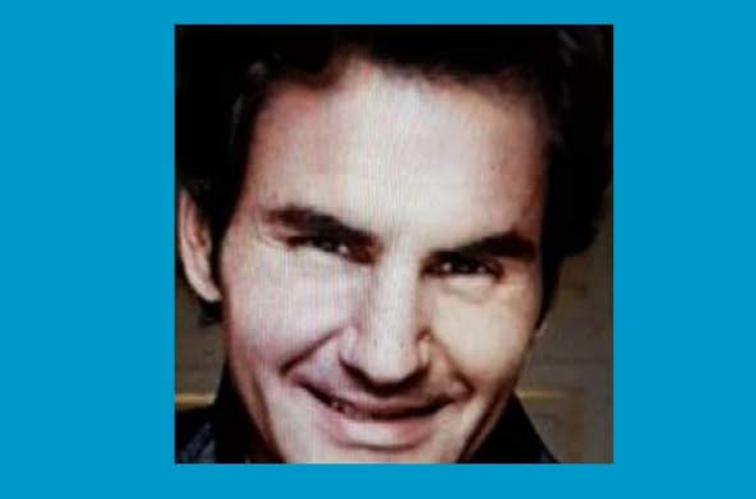
Real-time face detection and recognition

Displays relevant context for a recognized person

Automatically builds a list of (potentially) important people



Manage Person



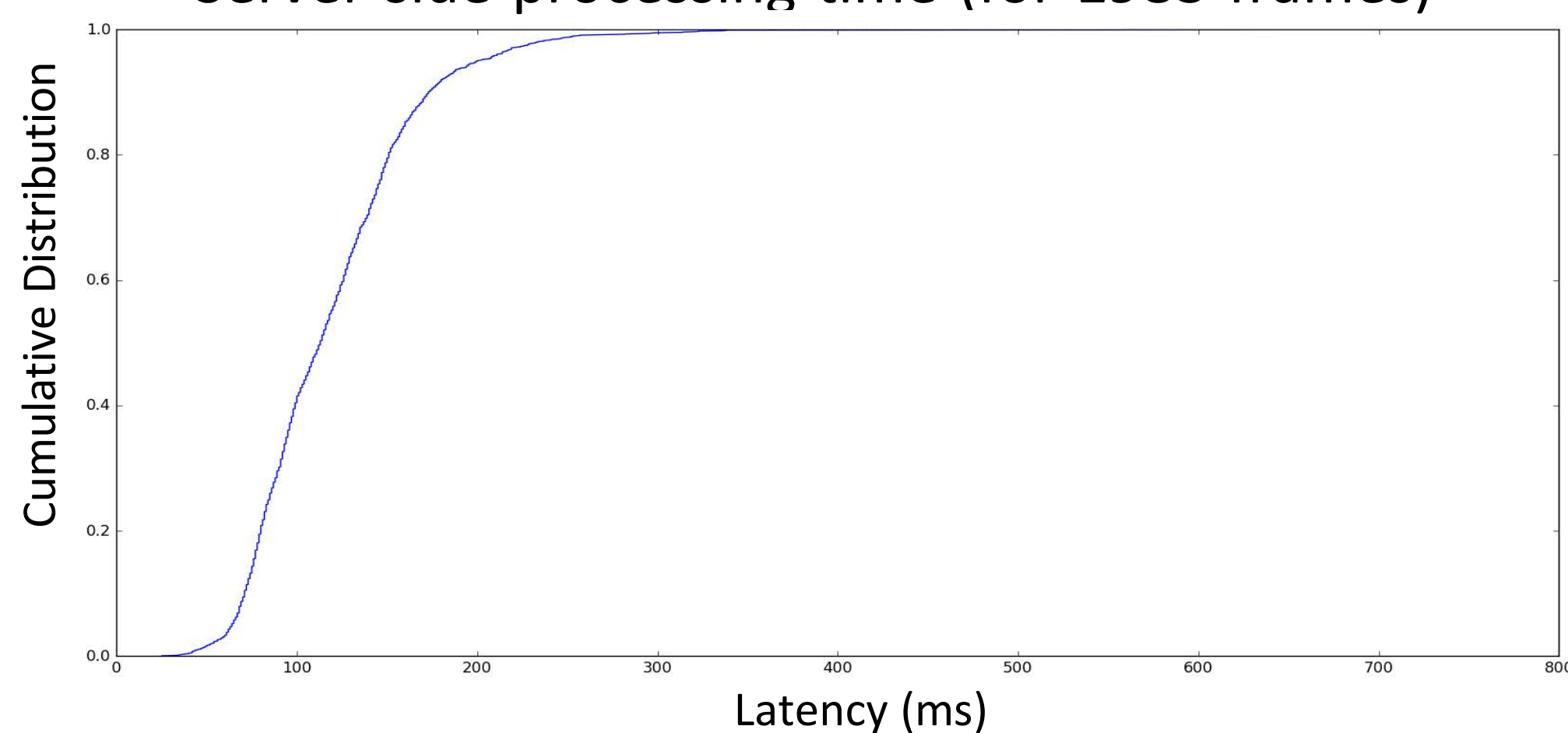
Store relevant details about people

Other Features:

- Display information from social media: education, organization, interests
- View list of known people
- Concurrent, multi-user recognition and training

RESULTS

Server-side processing time (for 1983 frames)



TAKE AWAYS

- Face-tracking is indispensable: hides latency of critical path, reduces bandwidth usage, and allows concurrent, multi-user training
- Google Vision API is difficult to port to ODG
- Can achieve 30+ fps on the client side
- Losing tracklets results in high jitter