BestFaceForward

Adjon Tahiraj, Andrew Doan (lead), Bik Nandy (scribe), Ryan Gormley, Tim Chang

Partnered with LogMeIn®

Existing Challenges

- Online interviews are impersonal, disengaging, and hard to connect.

- Causes difficulties in gauging a candidate's fit or skills effectively.

- Additional technical issues:
  - Audio & Video Problems

Quotes from Interviewers

"I wouldn't get that experience and I think **body language** in any setting really tells a story as well about where somebody's at and how interested they are or if they even want to be there or that sort of thing."

- Anne S, Account Services Manager

"I think with the video software you definitely **lose a bit of the personal interaction** and and like their **body language**... often times a you have to kind of just derive from the person."

-Brian M, Senior Manager

Quotes from Interviewees

"It feels like there is **no genuine connection nor direct connection** and also no one looks at each other directly."

- Benson C, CS Student

"There is **need for back and forth pauses** to affirm that we can move on."

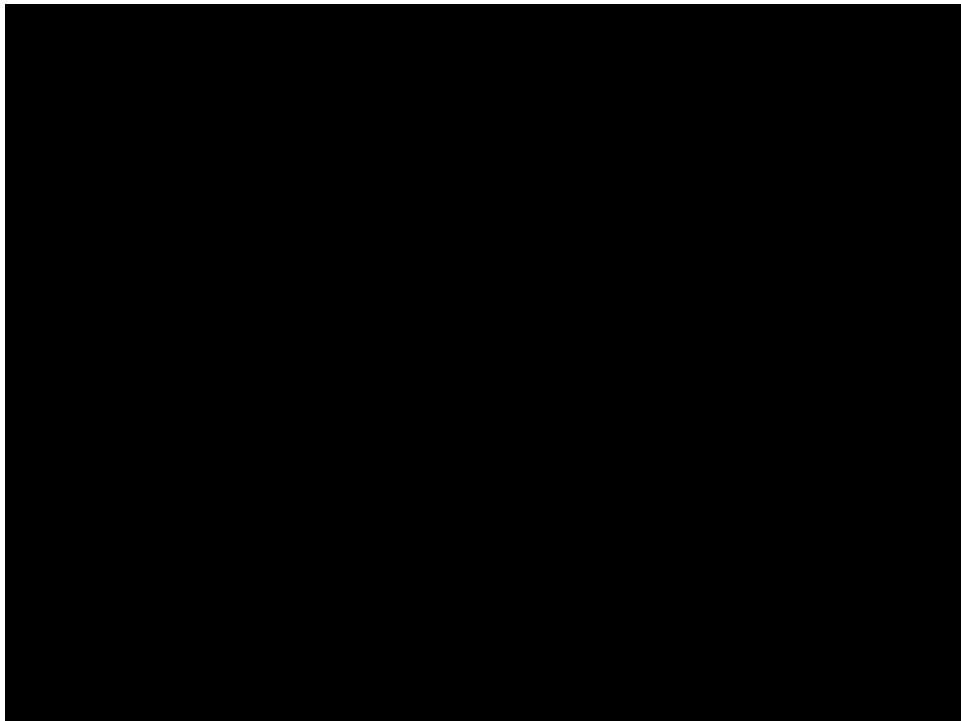**- Matthew W, CS Student**

Solution: For the Interviewer

- Engagement and Sentiment Analysis of Audio (voice) and Video
  - Ensure interviewee is comfortable & gain understanding confidence levels
- Access to Resume and personal Notes + Eye Gaze Correction
  - Limit the time interviewer looks away from the screen
- Captioning and Live Translation
  - Bypass poor audio and language barrier
- Reminders (Timed)
- Speech to Text Logging
- Background Blur + Professional Filters
- Screen Share

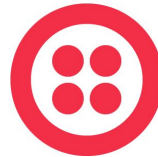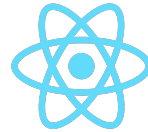# Solution: For the Interviewee

- Engagement and Sentiment Analysis of Audio (voice) and Video
  - "Breathe indicator" if nervous
- Notes
- Captioning and Live Translation
- Background Blur and Professional Filters
- Screen Share

Demo

Tech Details

- **IBM Watson**
  - sentiment analysis on text
- **Microsoft Azure Cognitive Services**
  - sentiment analysis on video
- **Google Cloud**
  - translation
- **Twilio Video**
  - video chat
- **Web Speech**
  - live transcription

- **Node.js**
  - Backend Server
- **React JS**
  - Front-end Web Application
- **AWS DynamoDB**
  - Database (usernames and interview data)

Technical Challenges

- Speech to text

- Grabbing video frames

- Node JS - React client server interaction

Next Steps

- Design and implement UI
  - Login/Join Meeting
  - Transcript, Translation, and Sentiment Analysis display
- Implement Dashboard and Post-interview Analytics
  - Hold interviewee info and interview notes on Dashboard
  - Generate visual report on interview sentiment
- Flush out final features
  - Blur Background and Eye Gaze Detection
- Move website from localhost to a hosting service