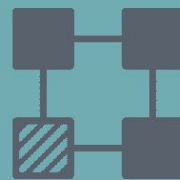# IRIS

Bridging the Communication Gap

StorkeAI

OUR TEAM

Krishna Nanda
Team Lead

Renee Labutay
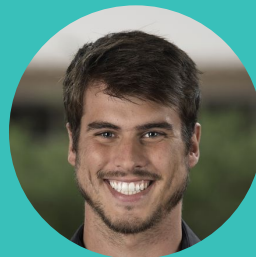**Scribe**

Regina Weinreb

Alex Rasla

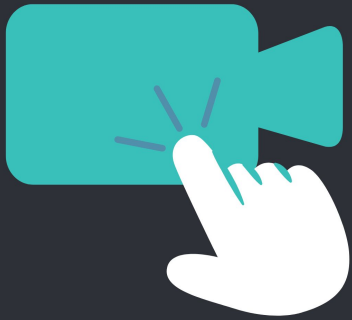Raymond Deng

MENTORS

Lauren Hedberg

Caitlin Davis

Luan Vieira

Rachel Pham

By 2025, 36.2 million Americans will be working remotely.

*Video conferencing services have seen a **10x** increase in usage.*

Autistic People Are Struggling

sensory overload

Autistic burnout

detecting emotions, tone & sarcasm

" **85% of college educated Autistic adults are unemployed**

There is an untapped potential that almost no one is paying attention to

Talent Matters

Exhibit 1

The relationship between quality of talent and business performance is dramatic.

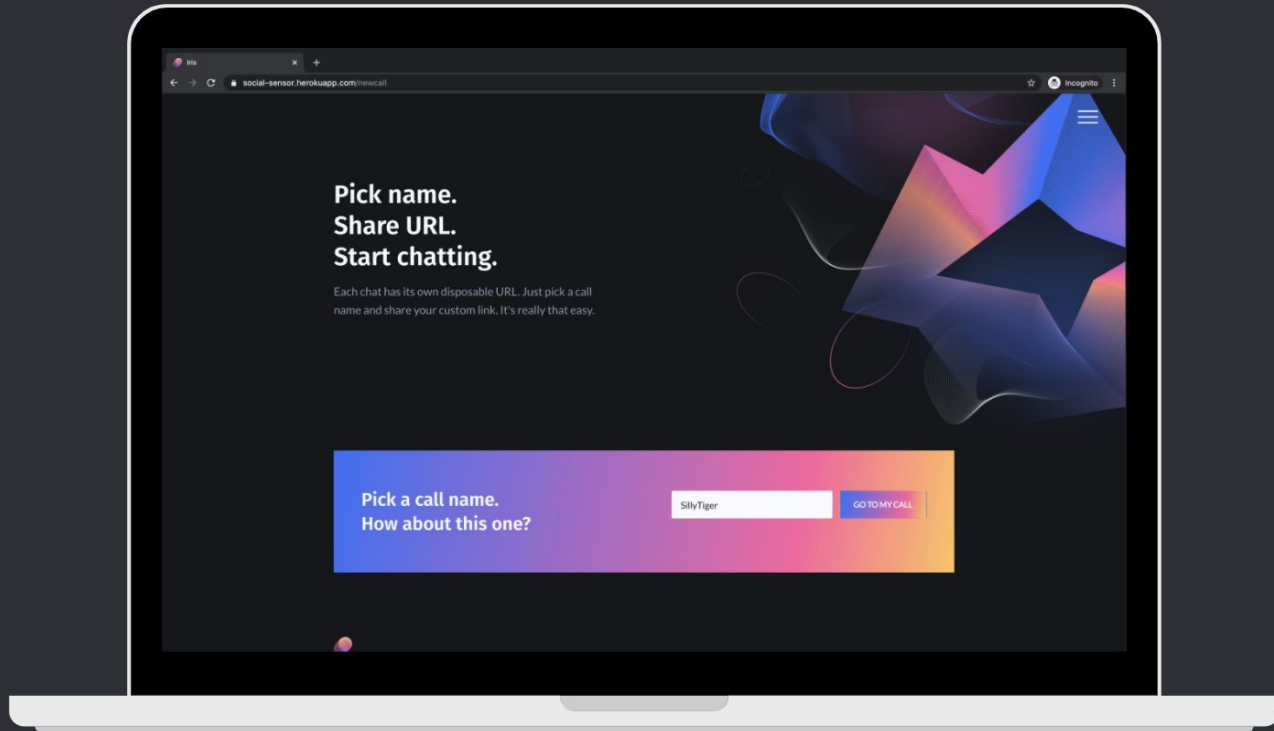**Productivity gap between average performers and high performers,** by job complexity, %

Complexity	Value
Low complexity	50
Medium complexity	85
High complexity	125
Very high complexity	800
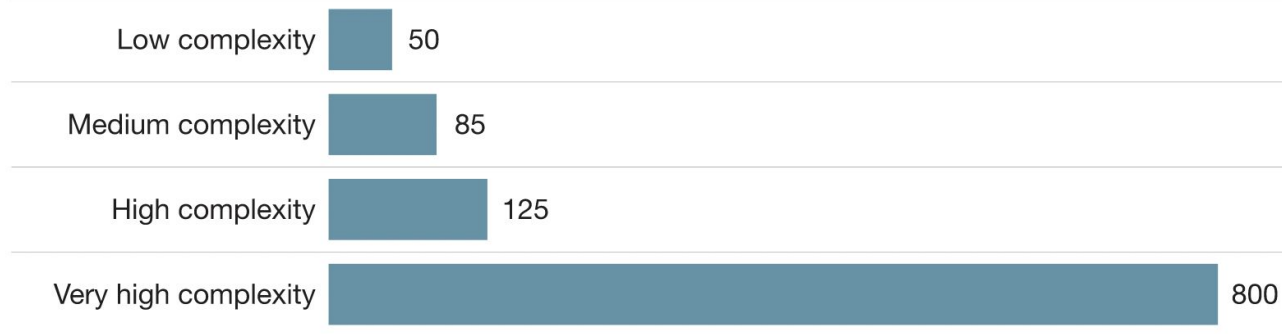
IRIS

Inclusive Video Calling for the Workplace

IRIS — a lightweight video call platform

IRIS FEATURES

Stressors

Solutions

Social Interactions ⟶ Sentiment Analysis

Sensory Overload ⟶ Customizable UI

Excessive Anxiety ⟶ Research Based Features

Meet Krishna

Has trouble navigating social interactions

Has a meeting with his manager, Alex

TECHNOLOGIES WE USED

TECHNICAL CHALLENGES

1. **Scaling Iris to 10k users, <<1s inference**

2. **Autonomous self-tuning**

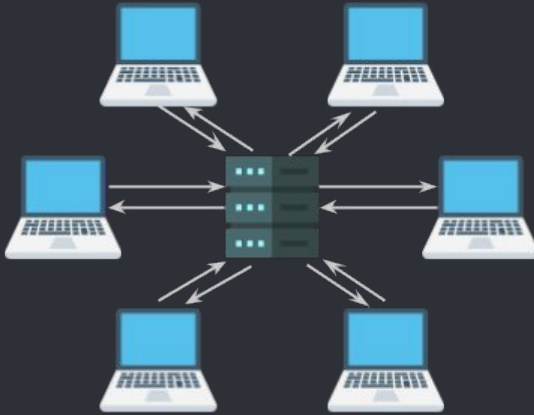3. **Future work: openFER**

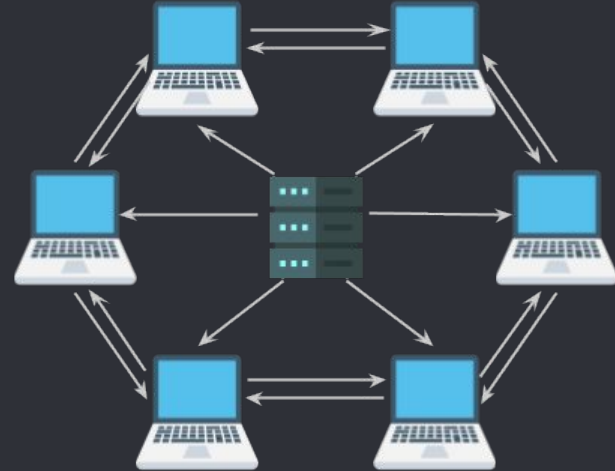# TECHNICAL DETAILS: P2P Overview

Server-Based video calling

Peer-to-Peer video calling

TECHNICAL DETAILS: P2P at Scale

**Server-Based video calling**

Peer-to-Peer video calling

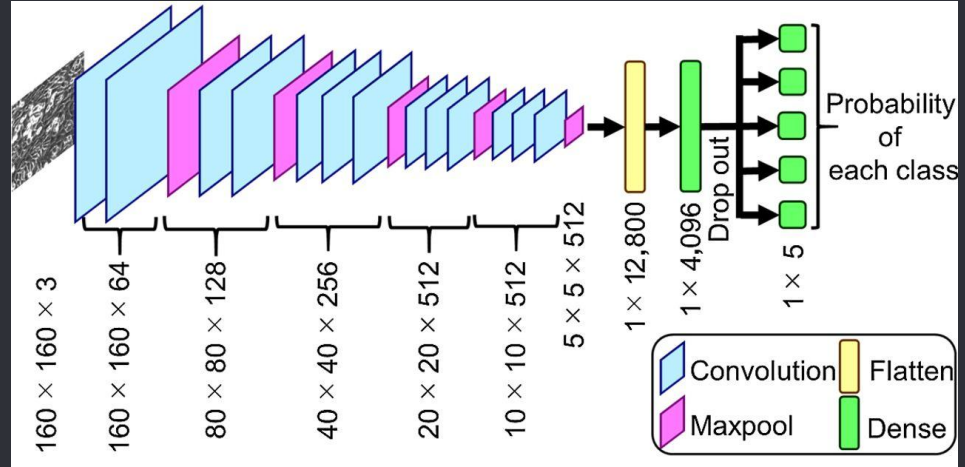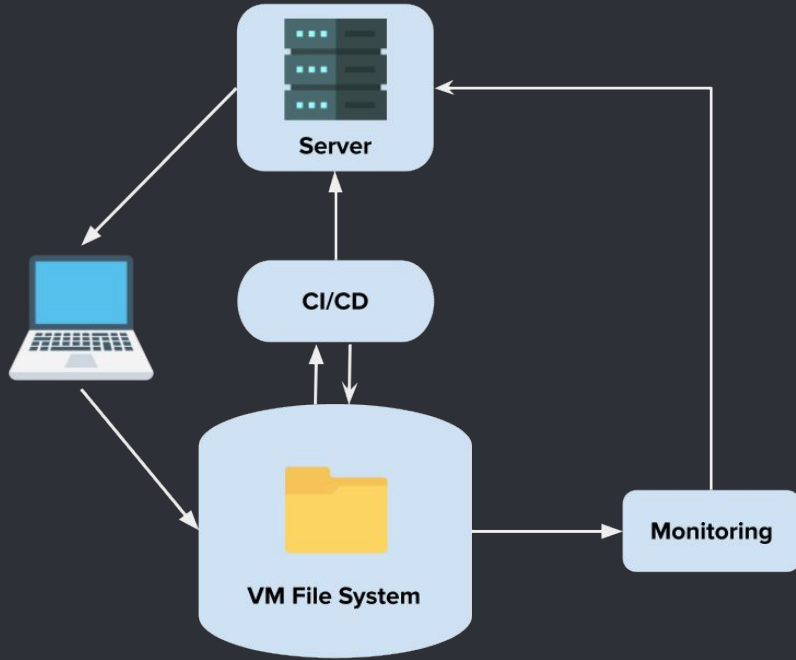# TECHNICAL DETAILS: Code Simplicity

code to integrate a model:

```
onAddStream: async function (event) {

    setInterval(async () => {
        const video = document.getElementById('remote-video')
        const detection = await faceapi.detectSingleFace(video)
        const predicted_expression = Object.keys(detection['expressions'])
        document.getElementById('predicted-output').innerHTML += predicted_expression

    }, 300)
},
```

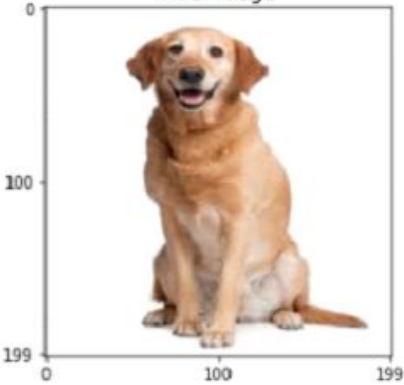**Lines of Code**
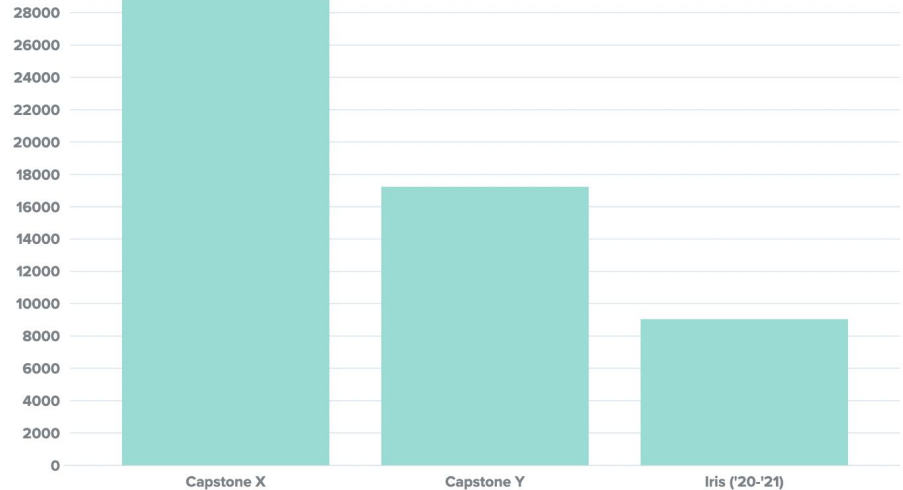
TECHNICAL DETAILS: Self-Tuning System

Future Work: openFER

BREAKING DOWN SOCIAL BARRIERS

MAKING THE WORKPLACE MORE **INCLUSIVE**

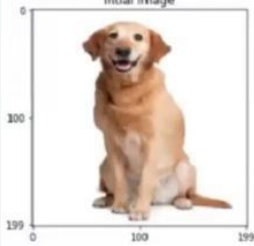# Thank you!
ANY QUESTIONS?

StorkeAI

Recorded Demo

Future Work: openFER

Select all images with
cars
Click verify once there are none left
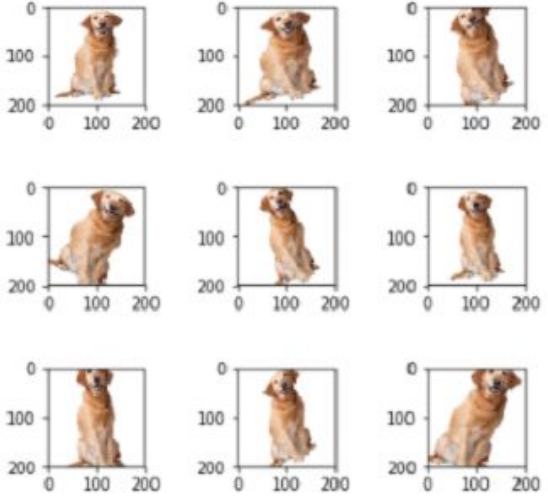
VERIFY

Intial Image

Augmented Images