

Take a deep breath

Stress, everyone deals with it.



Some stress statistics...

Top Causes

- ▶ Job Pressure
- ▶ Relationships

48%

People in the US
who say stress has
a negative
impact on their
personal and
professional life

48%

People in the
US who feel
their stress has
increased
over the past
5 years

\$300
BILLION

Annual costs to
employers in
stress related
health care
and missed
work

How can we avoid it?

Introducing...

breath

ADAM GRAY

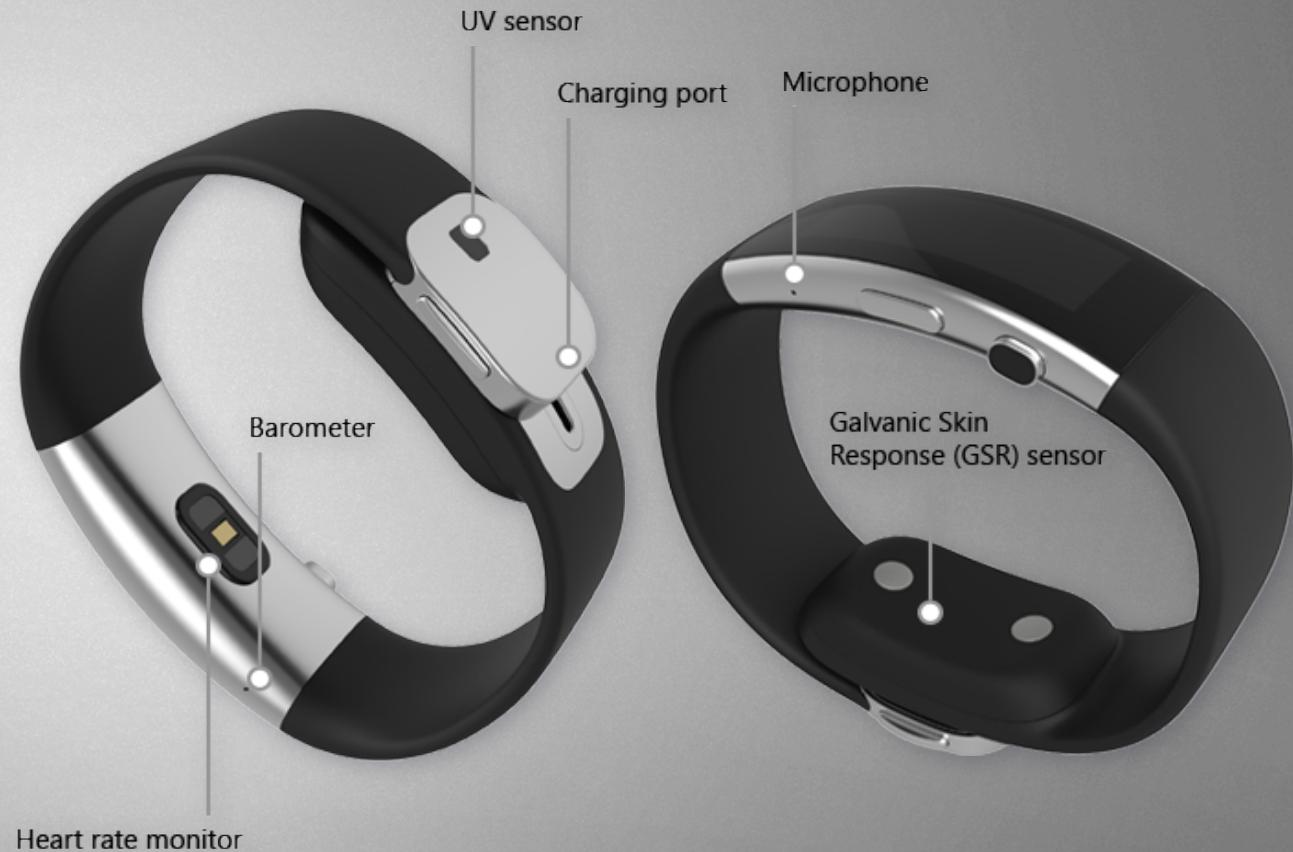
Breathe is...

- ▶ A mobile application that learns about you and the things you do
- ▶ A stress detection, reduction, and avoidance system

Detecting stress

- ▶ Breathe uses the Band's heart rate monitor to detect and track your stress level in real time

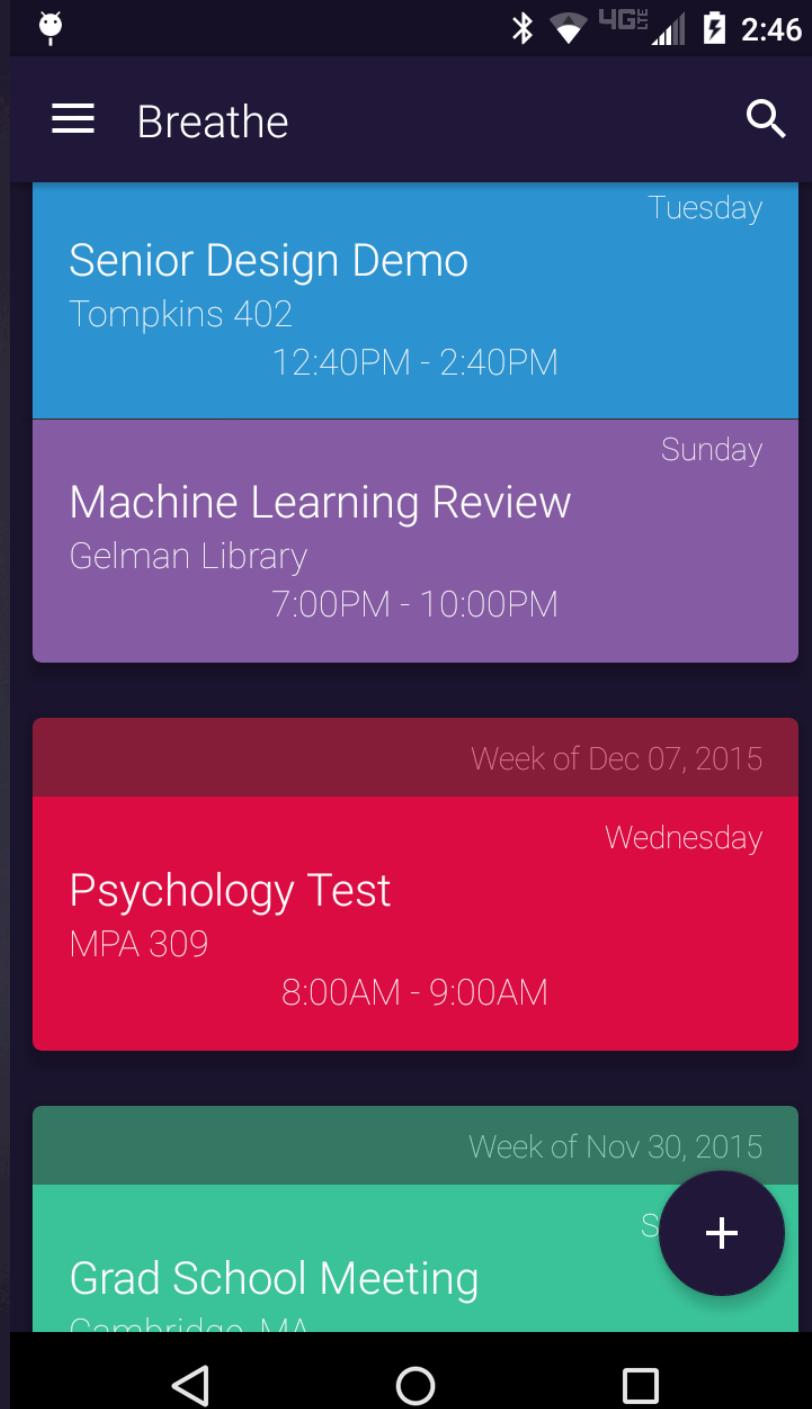
Microsoft Band



Learning about you

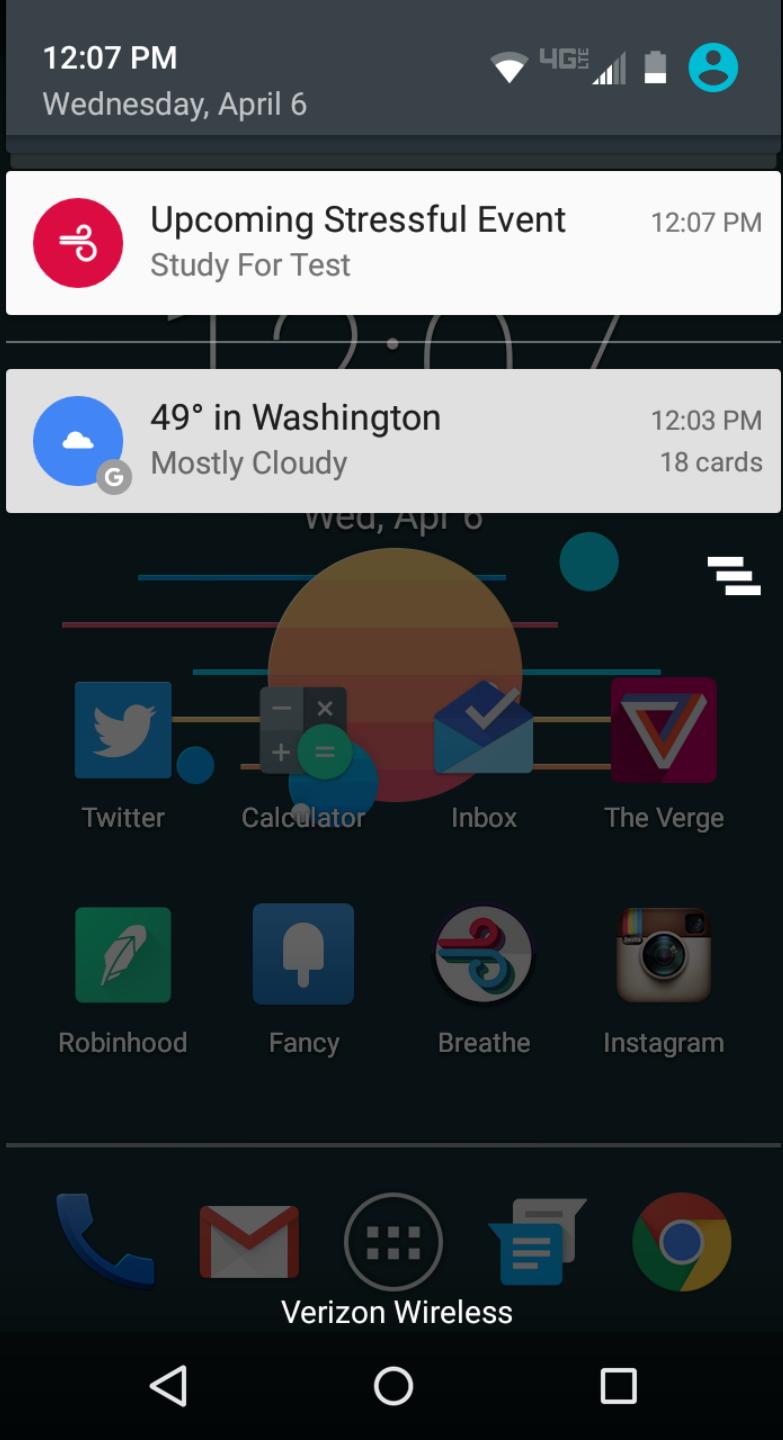
Band Sensors + Breathe App Answers:

- ▶ What?
- ▶ How ?
- ▶ Who?
- ▶ Where?
- ▶ Surrounding environments?



Breathe can...

- ▶ Find stressful and relaxing factors
- ▶ Predict stressful events
- ▶ Improve over time



Study For Test

77% chance of stress predicted

Wednesday, 04/06/16
3:30PM - 4:30PM

Gelman Library

Ferris Bueller
Cameron Frye
Adam Gray

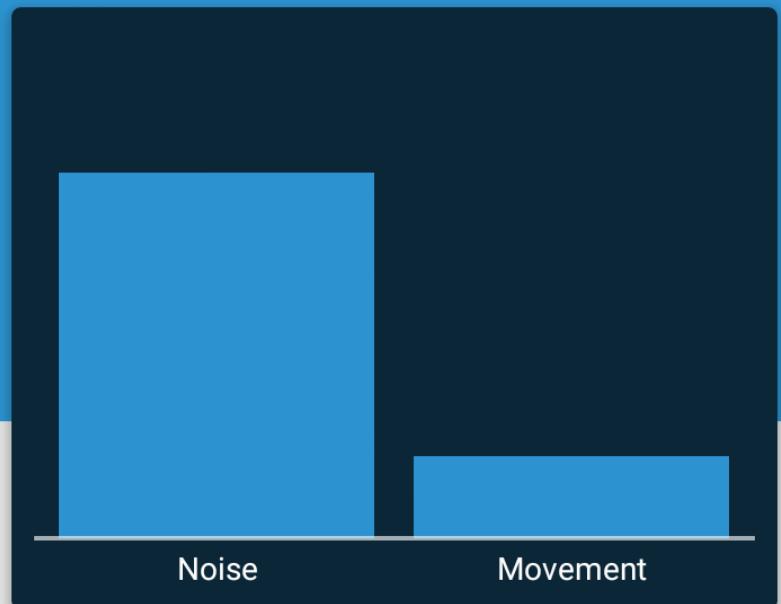
Historically Stressful Factors

88% of **Study For Test** events with **Ferris Bueller**
74% of **Study For Test** events at **Gelman Library**
70% of events with both **Ferris B.** and **Cameron F.**
58% of **Study For Test** events

Technical challenges

- ▶ Noise Level
- ▶ Stress level
- ▶ Stress prediction

Flight to Boston



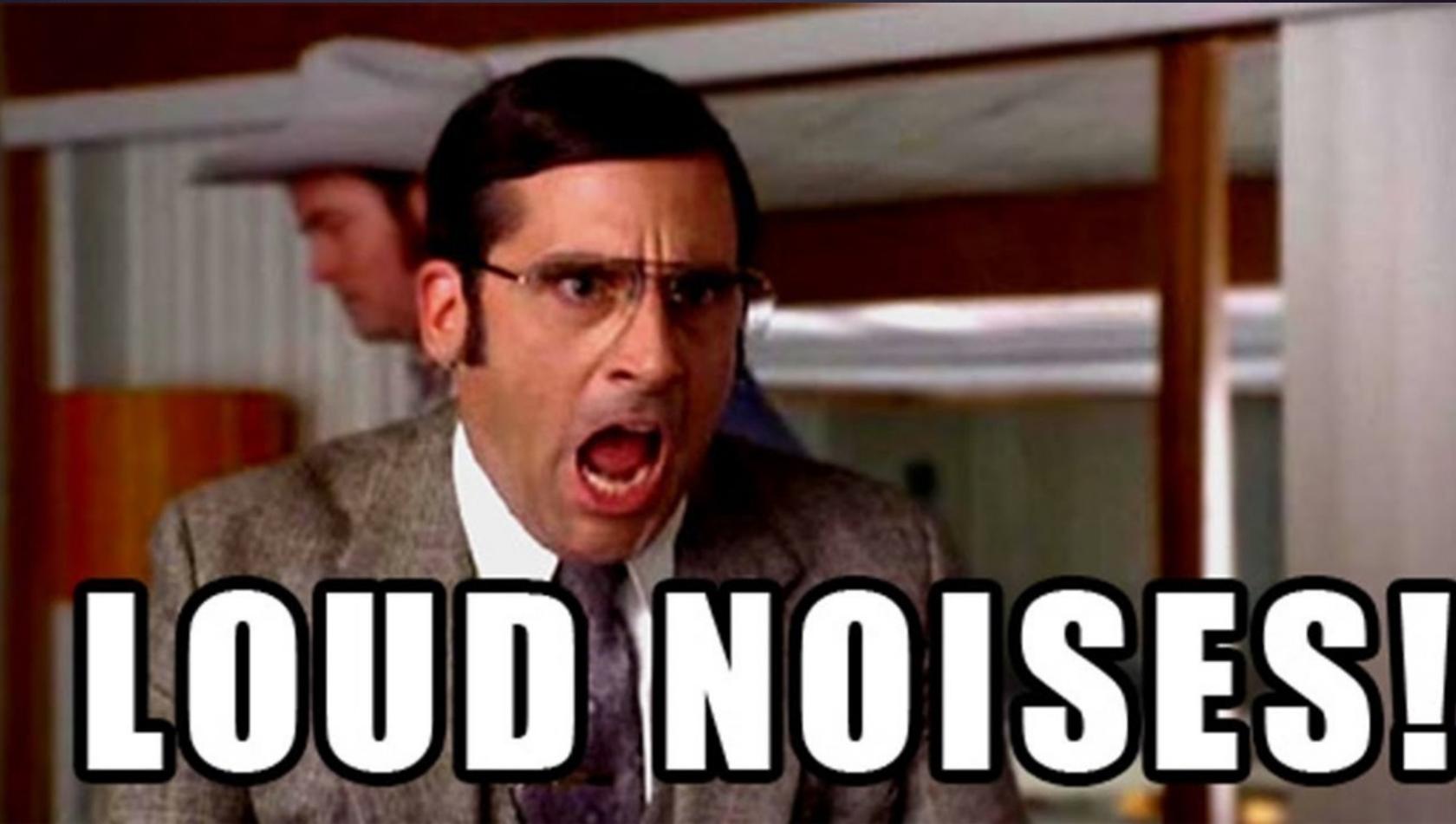
⌚ Sunday, 05/17/15
6:50AM - 1:45PM

📍 Dublin DUB

👤 Adam Gray

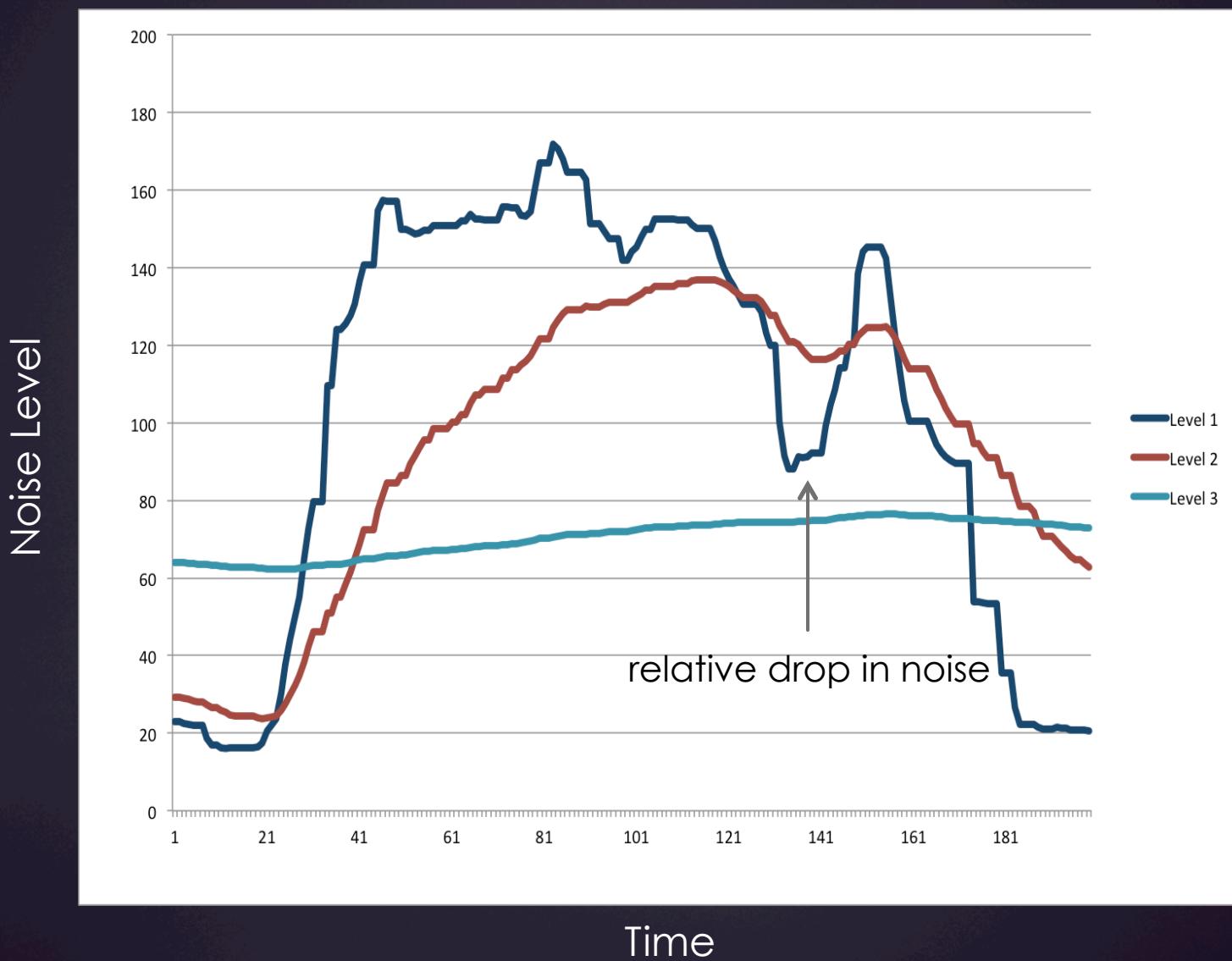


Challenge 1: Noise Level



[Anchorman]

Detecting change in noise level



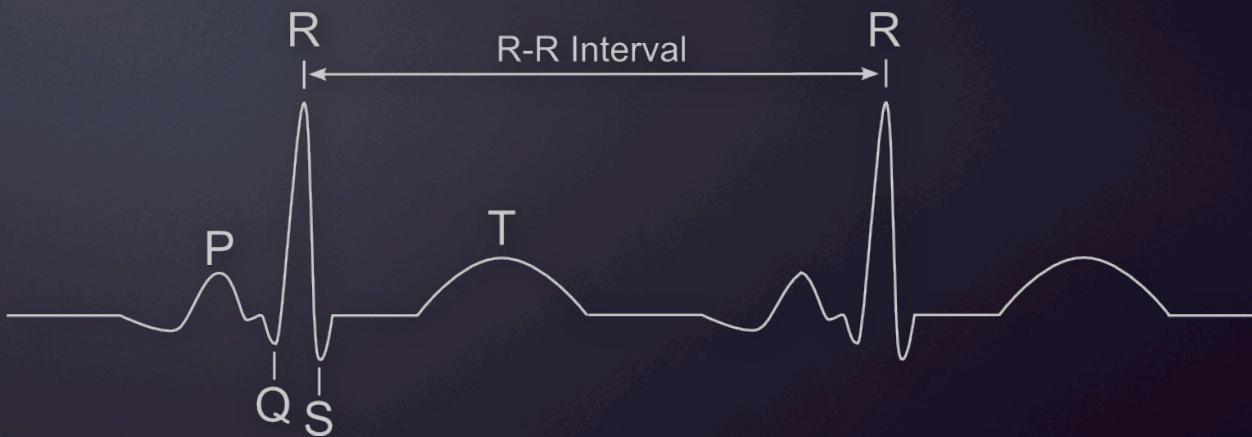
Challenge 2: Stress



- ▶ Never been done before
- ▶ I figured it out.*

Detecting stress level

- ▶ Relaxed = Detectable Heart Pattern
- ▶ Stressed = Undetectable Heart Pattern



Challenge 3: Prediction

- ▶ Predictions must work on unseen events
- ▶ Some factors are unknowable



Predicting a stressful event

- ▶ Finds stressful/relaxing factors
- ▶ Makes prediction on upcoming event

≡ Study For Test

77%

chance of stress predicted

⌚ Wednesday, 04/06/16
3:30PM - 4:30PM

📍 Gelman Library

👤 Ferris Bueller
Cameron Frye
Adam Gray

Historically Stressful Factors

88% of **Study For Test** events with **Ferris Bueller**
74% of **Study For Test** events at **Gelman Library**
70% of events with both **Ferris B.** and **Cameron F.**
58% of **Study For Test** events



Breathe...

- ▶ Is completely unlike any other mobile application
- ▶ Learns what stresses you out and shares that information with you
- ▶ Helps you better understand yourself and different aspects of your life
- ▶ Makes your life easier

It really helps to Breathe



Thank you