Summary of Discussion
Discussion Topics

1. Sentiment Analysis
2. Physiology
3. Positive Emotions
4. Negative Emotions

Part 1: How to Recognize Emotions?
Discussion Topics

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4. Negative Emotions

5’ wrap up
Discussion Topics

1. Sentiment Analysis
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3. Positive Emotions
4. Negative Emotions

Part 2: How Do We Leverage Emotion Detection?
Summary: Part 1
Summary for “Sentiment Analysis”

• Data sources: being able to aggregate multiple sources is necessary for smaller applications.
• In some datasets, many emotions may be neutral. Balancing datasets is a challenge.
• Optimize by precision or recall? Does the class and domain change the optimum balance
• Emotion mining vs. opinion mining. It’s possible to record a negative opinion in an emotionally neutral way. May depend on domain.
Physiology: Challenges

• Learning effects
• Time to conduct studies
• Cost/payment to participants
• Sensor drift/noise
• Bridging the gap between sensory tasks and high level tasks (perhaps use Hackerrank.com for tasks)
Physiology: Suggestions

• Conduct study in high-stakes environment (i.e., interview)
• Use ACT-R and SOAR as inspiration for cognitive models
Summary: Part 2
Translate Negative Emotions into Positive

• Stakeholders: Users vs. Developers
• Reformulating (maybe not for users)
• Intervention
  • Person, Bot, vs. Hybrid
• Workplace that allows for support
• Alternative activities / drawing
• Filter/Translator (automatically translate negative to less negative)
  • Person
  • Bot
What can we do with a positive emotion detector?

• If you fire someone, and everyone because happy, then you’ve made the right choice.
• If pairing people together increases their happiness, you should pair them.
• Customer anticipation can be used to prioritize releases.
• Recognize and interfere with code-ownership
What can we do with a positive emotion detector?

• Identify quotes for advertising (both for getting employees and customers)

• Shared excitement in a brainstorming meeting can indicate everyone liking an idea.

• Finding the right person to do code reviews

• Shared positive emotions might represent being “in-sync” on a particular task.