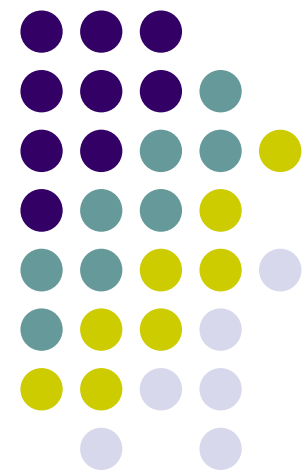


Ubiquitous and Mobile Computing

CS 403x: Driving Auto Respond

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Problem

- People can be distracted by phones while driving
- Mitigates distraction by
 - Auto detecting driving
 - Silence device
 - Auto send response



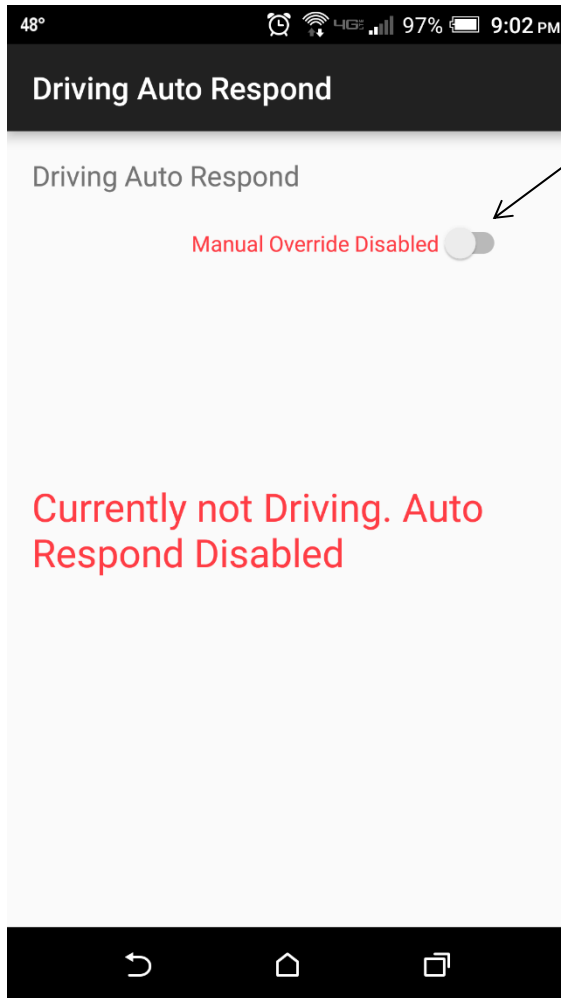
Implementation

- App listens for system Broadcasts that are sent when the user receives a text or phone call
- Also listens for results from Google Activity Recognition
- When communication is received while the user is “in vehicle”, an automatic response is generated
- App can be disabled with a GUI toggle

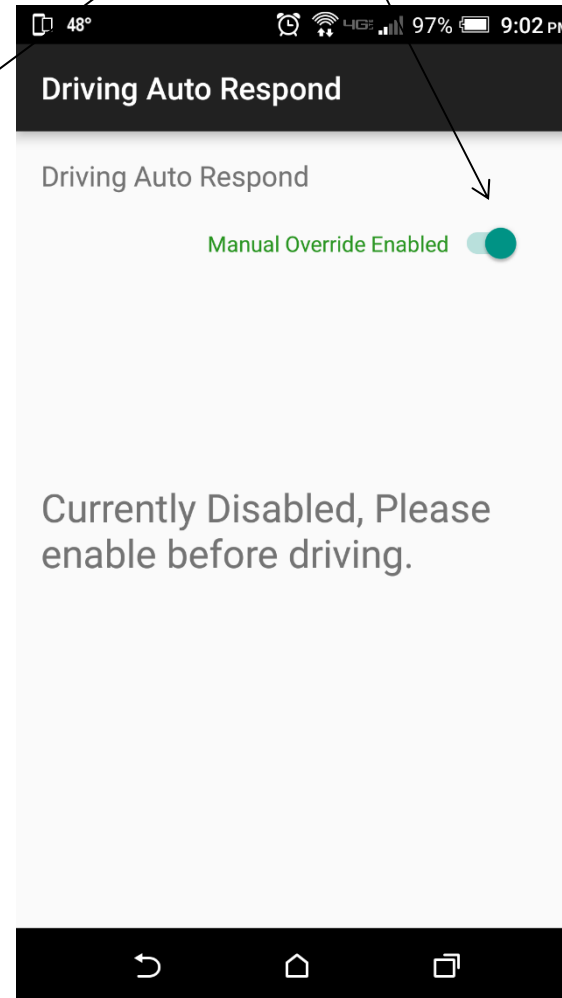
Screen Shots



Manual Override



Manual Override Disabled
Driving Not Detected



Manual Override Enabled



Evaluation

- Low Energy Consumption
 - 2mAh
- Texting
 - 88% of people have plans with unlimited text
- User Tests
 - UI critique
 - Activity accuracy

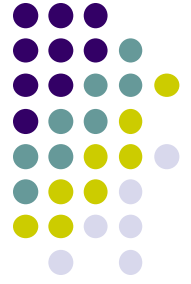


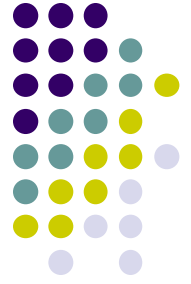
Future Work

- Bluetooth device recognition
- Calendar access
- Learning algorithm
- Timed manual override

Conclusion

- User responses
 - UI text needed to be refined
 - Option to silence
- Improve functionality





References

- Almost 90% of Americans Have Unlimited Texting:
<http://pages.instantcensus.com/blog/almost-90-of-americans-have-unlimited-texting>. Accessed: 2016-05-03.