



44 percent of all PM10-particles are emitted
by tires and brakes as well as swirled up dust

Vieweg, Christof: Die Motoren sind nicht das Problem(2017), in die Zeit URL: <http://www.zeit.de/mobilitaet/2017-02/feinstaub-motoren-luftverschmutzung-reifen-abrieb-bremsen>

intellilight



470 mi

002: Hits 1

Traffic signs

A graphic of a traffic sign showing a red 'X' over a speed limit sign.

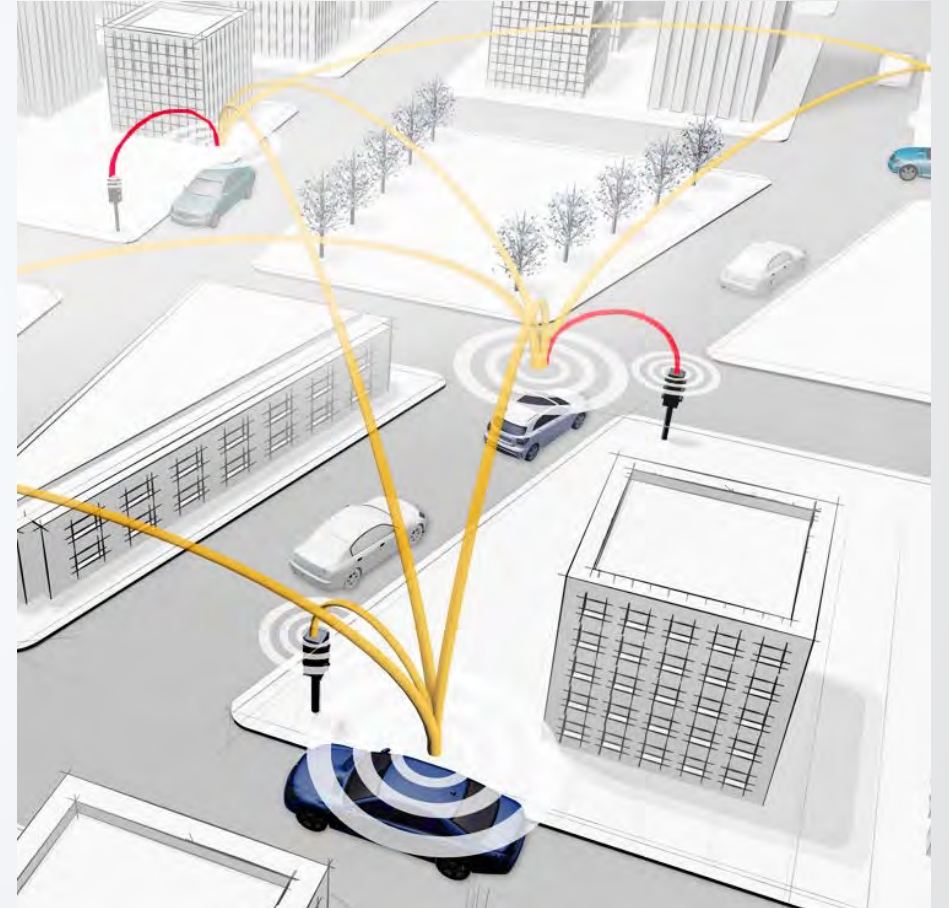
SPEED LIMIT 30

893 mi 20.2 mi
5:12 PM 61 mph

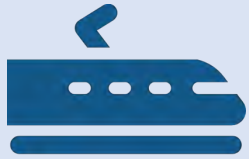


Vision: distribute light signal information

- ❑ IoT device built into light signals
- ❑ Decentralized communication
- ❑ Use Car 2 X as well as Wifi/LTE
- ❑ GPS for localization
- ❑ Apple/Google Maps Extension



3 stage implementation



- Separated driveway
- Self-managed infrastructure
- High energy saving potentials



- Exclusive drive lanes
- Avoid frequent stop & go
- Create awareness



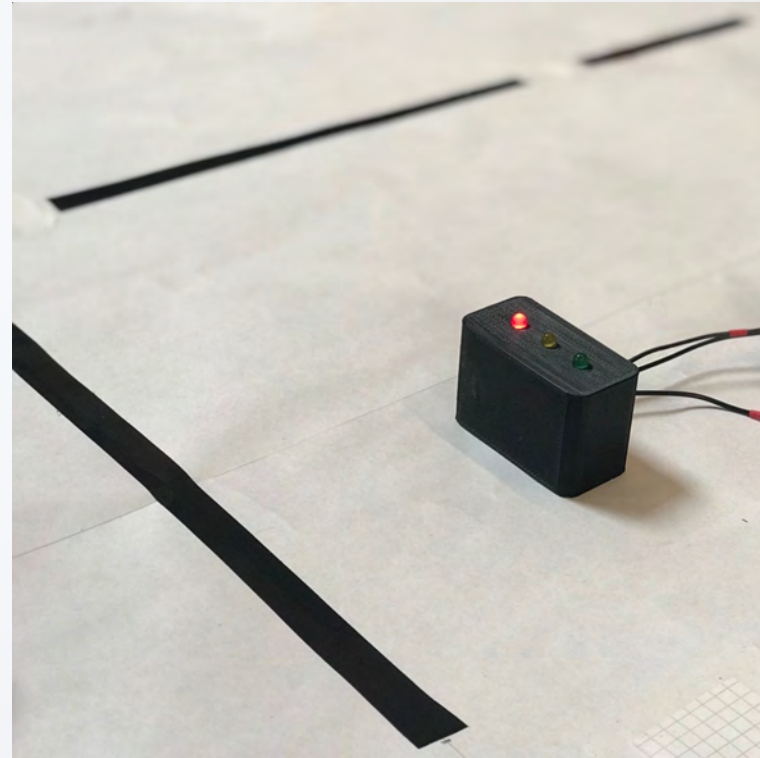
- Decrease particle emissions
- Individual fuel savings
- Massive potential

Our Prototype

❑ WaveShare AlphaBot 2



❑ Raspberry Pi controlled LEDs

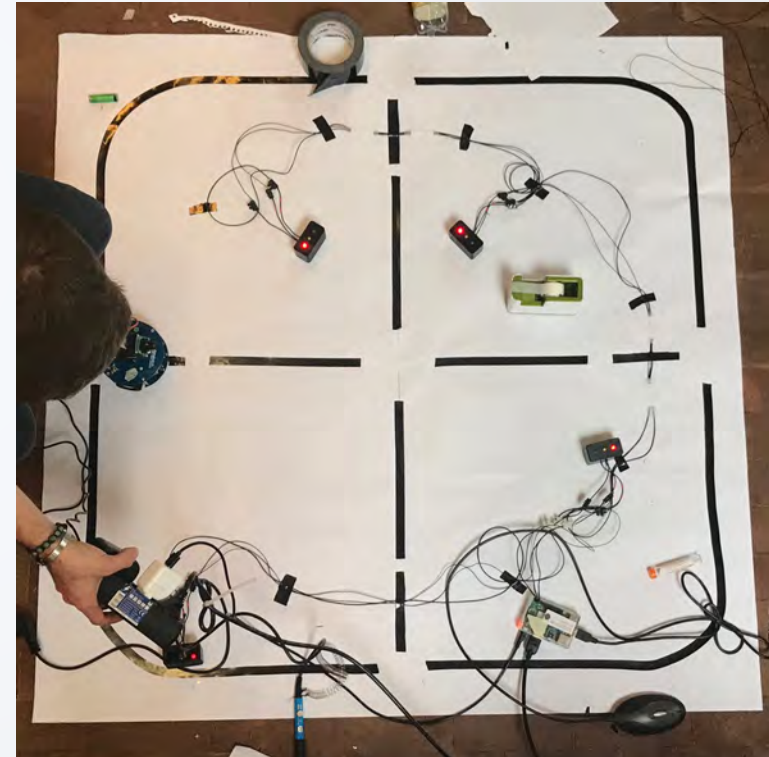


Our Prototype

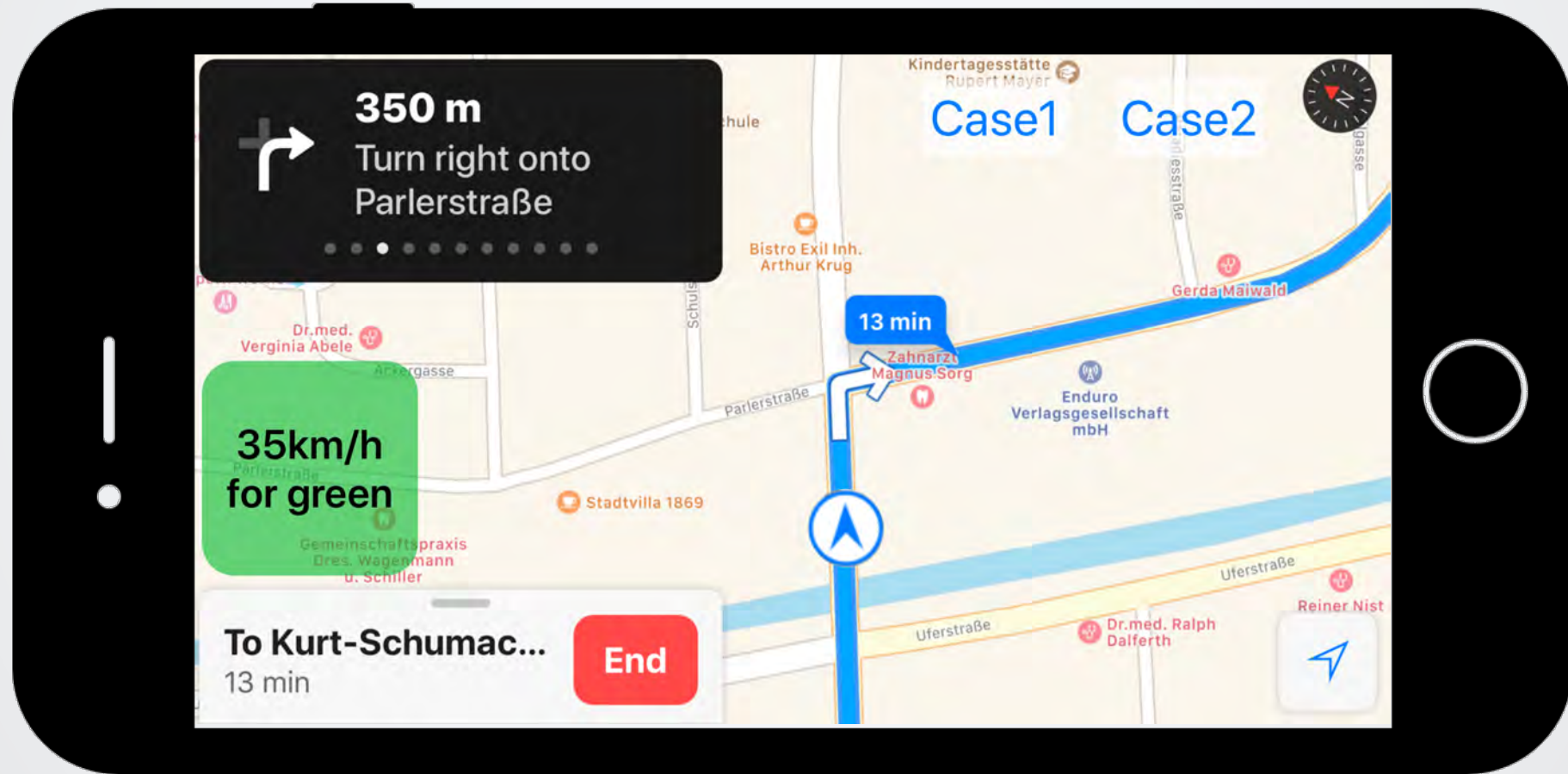
- ❑ 3D printed chassis



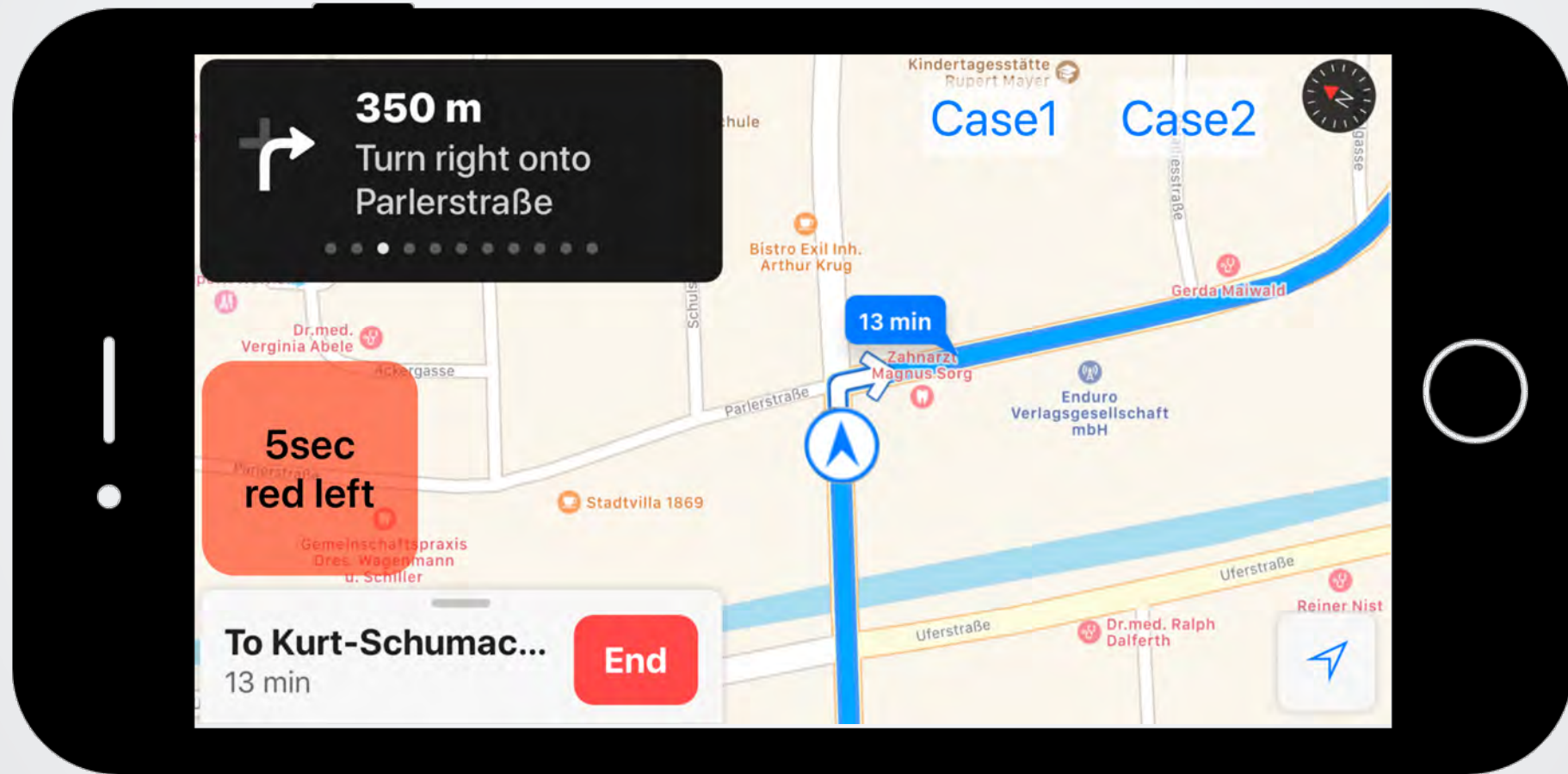
- ❑ self-built traffic crossway



Our Prototype



Our Prototype



Thank you

#Hack'n'Slay

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Quellen

UBA Feinstaub:

<http://www.umweltbundesamt.de/themen/luft/luftschadstoffe/feinstaub>

Neckarsulm Bild: <http://www.stuttgarter-zeitung.de/inhalt.feinstaub-in-stuttgart-plan-gegen-die-dicke-luft-hat-verspaetung.6051d6ef-2e10-468b-b215-48e506e16796.html>

Folgen Feinstaub:

<http://www.umweltbundesamt.de/daten/umwelt-gesundheit/gesundheitsrisiken-der-bevoelkerung-durch-feinstaub#textpart-5>

Tabelle Feinstaub:

<http://www.umweltbundesamt.de/daten/luftbelastung/aktuelle-luftdaten#/transgressions?s=JckxCoAwDAXQu/y5g7ol2VzcBK9Qa qyF0kqSDiLeXcH1vRsmvmgUVk21KOhG0pktHKIE006zssPFXkBD148OZ825mS8Gwrr0HRy0is2J8/ZRqO2r3yYNIJPGz/MC& k=rsyc4t>

Headl1: <http://www.stuttgarter-nachrichten.de/inhalt.car2go-gebietsreform-das-pflaenzchen-bleibt-klein.fbb39fde-cbf5-4204-8f33-b89fb52637ab.html>

Headl2: <http://www.stuttgarter-zeitung.de/inhalt.stuttgart-degerloch-traenke-und-hoffeld-kuenftig-ohne-elektro-smarts.53d602ac-47da-45f2-a734-17a373c86f29.html>

Headl3: <http://www.stuttgarter-nachrichten.de/inhalt.elektroautos-in-der-region-stuttgart-car2go-zieht-sich-aus-der-flaeche-zurueck.567504f5-4fa8-4d26-9be6-ca8f89fb5015.html>

Headl4: <http://blog.mercedes-benz-passion.com/2017/10/car2go-optimiert-geschaeftsgebiet-in-stuttgart-und-region/>

Headl5: <http://www.stuttgarter-nachrichten.de/inhalt.stuttgart-oeffentlicher-nahverkehr-wird-ausgebaut.a9f24df8-d6f3-484b-b6ba-4760b4e6c763.html>

Car2X Netz Bild: <https://www.mercedes-benz.com/de/mercedes-benz/innovation/car-to-x-kommunikation-2/>