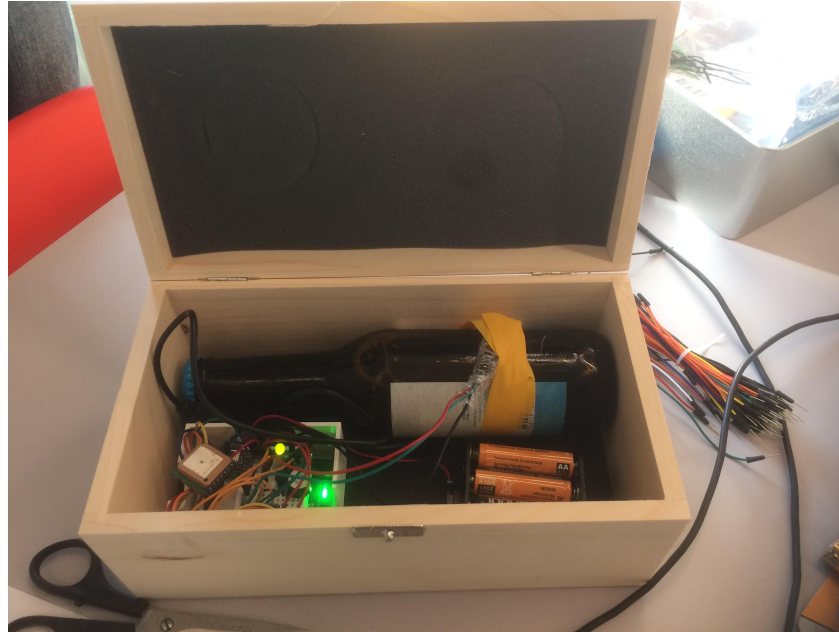
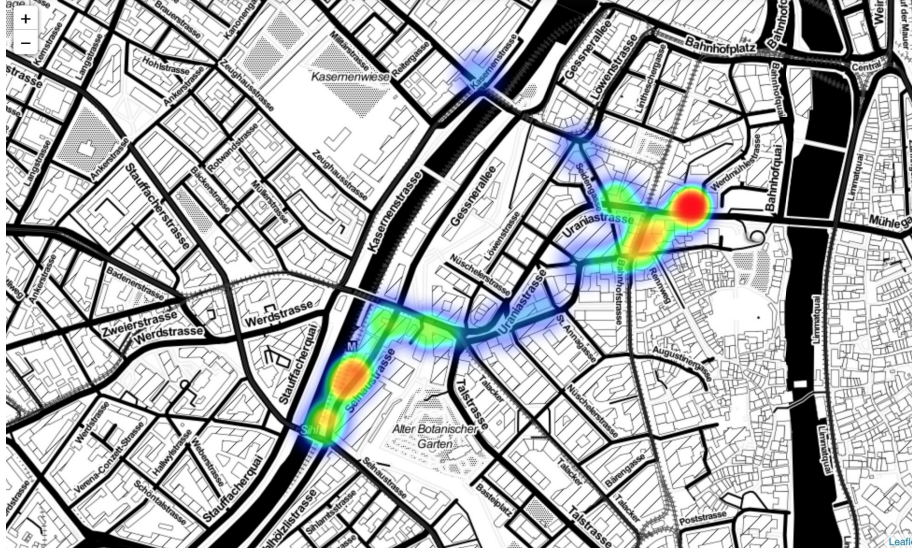


Electronics Setup

Box with product of critical temperature



Static Visualization of Bike Ride



As we notice from the above map

- the temperature rises across the ride (start bottom-left, end top-right)
- the hot in bottom-left corresponds to the starting/ending point where we touched the temperature sensor.

Cool Interactive Visualization of Bike Ride

<https://tsarouch.carto.com/builder/34eac158-2edf-4bee-bf5c-4e19e09439c7/embed>

Taking the Extra Mile

Improvements of very critical deliveries

Here we propose a solution for the cases where we will have to transfer products in very demanding conditions e.g. stable environment in low temperatures.

We propose the use of an ice-bag (controlled temperature of ice e.g. a bit below 0)

Like this:

- We have a controlled environment of transportation
- We can now make some modeling of the heat transfer inside the box and forecast the remaining critical delivery time



Forecast of Critical Delivery Time

Using the heat - transfer modeling we can predict the critical remaining ride time for the product.
E.g. critical temperature @ 3 degrees => critical remaining time ~ @300min

