Name:
Post-Covid Intelligent use of Public Space;
Social Distancing by Crowd Prediction & Mobility Management

Description:
Now that our public space is even more scarce than ever before we want it to be used safely and efficiently. Our city cannot afford to let enormous crowds un- predicted /managed.
As a municipality we are installing all kinds of assets (IOT sensors, crowd detecting cameras, distance detecting cameras a.o.) in a fast pace, collecting large amounts of data (under the name 'Crowd Monitoring System Amsterdam, CMSA)

Based on these counts, in combination with other data sources such as events, vacations, weather etc, it is possible to predict how busy it will be. We are also closing data-deals with parties e.g [redacted] data, payment data and public transport data.

Good predictions can lead to just in time mitigating operational crowd management measures by the operational staff. The effectiveness of these measures can also be measured and lead to more data which can make the system even smarter.

This assignment builds on this to improve these long-term forecasts with new data sources on 3 points:
1. Which other parameters have a predictive value for crowds?
2. Which other data sources can show pressure (for example, by comparing telecom data with the data from the sensors)
3. Adding short-term crowds forecasts

Work environment:
Within the City of Amsterdam, the student will work within the program called IGOR (Intelligent Gebruik Openbare Ruimte) / IuoPS (Intelligent use of Public Space). Working with tech experts from the [redacted] (Mobility Lab) platform. Once a week all students gather for more in-depth technical support.

What we offer:
* Freedom and responsibility in team characterized by a Startup/High Performance culture (CTO/Marineterrein)
* Working in a team of experienced people (Crowd Management, Concept Visioning, Engineering, Data Science & AI
* Immediate impact by short development cycles to implementation through MVE's (Minimum Viable Experiments)
* A monthly internship compensation, lunch & practice to make a lot of fun after hard work together
* get your own tech channel at our IGOR-Slack community and accept the challenge to acquire the largest group of followers by sharing tech-stuff

Expectations

Most important thing is to be eager to explore and learn together and step out of the comfort zone. The aim to achieve results directly applicable and relevant to the municipality. (i.e. not merely an academic paper). In addition to the delivery of useful predictive models, relevant results also include byproducts of the whole data analysis/processing pipeline that could be turned into insightful reports.