





Project INSIGHT

People in Motion Lab - UNB



07/09/2019

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0000	STMPIEK The City	tion out to the public so they can unde	e local Fredericton company, SimpTek, to co			
eleven x	Investigate the data! Below are sample detanets from various sensor Investigation of the detanets from various sensor Air Quality Sensor	delivery.	Incluin Inclui	e a possible without comporting the	+	INSIGHT
	Explore	Explore	05-21 Explore	05-21. Explore		

Air Quality Sensor

Showing 1 to 10 of 5,130

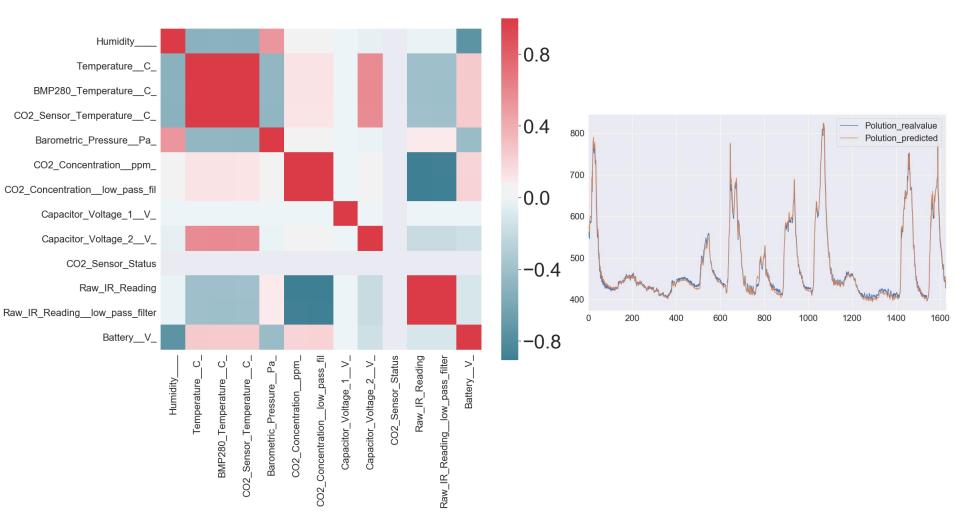
Hint: Click on $\overline{\mathbf{y}}$ to filter columns.

▼ Date/Time	Ŧ Humidity (%)	▼ Temperature (C)	▼ BMP280 Temperature (C)	▼ CO2 Sensor Temperature (C)	▼ Barometric Pressure (Pa)	Ŧ
3/24/2019, 3:55 AM	14.32	22.37	21.87	22.42	97850	41
3/24/2019, 12:15 PM	15.07	22.38	21.87	22.42	97746	40
3/23/2019, 11:15 AM	15.74	22.31	21.81	22.35	98006	40
3/24/2019, 4:05 AM	14.37	22.38	21.89	22.43	97828	41
3/24/2019, 4:15 AM	14.38	22.39	21.9	22.45	97814	41
3/24/2019, 4:25 AM	14.38	22.4	21.91	22.46	97812	41

The idea

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How does it work?



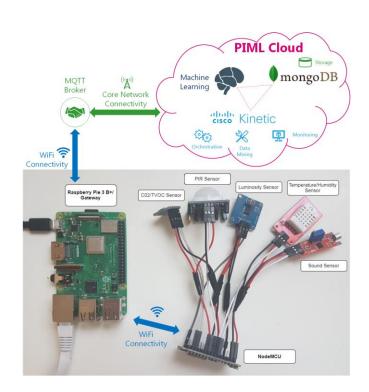
How does it work?

- There's an inverse correlation between air quality and sunlight (air quality)
- The sensor's battery level varies with temperature (air quality)
- Hours of the day with less noise pollution (sound sensor)
- Fatal car crashes are less and less correlated with the severity of the accident (car accidents)

Business model

- Potential clients: Government agencies, private companies using IoT
- Solution tailored to the client's database with very little effort
- Strategy:
 - Partnership with ESRI (same clients)
 - Partnership with eleven-X (value added)
 - Partnership with Fredericton City for validation (open for innovative ideas)

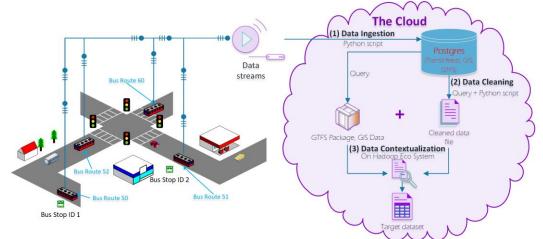
Technical validation



Indoor Occupancy Prediction, Air Quality Index Prediction, Noise Pollution Monitoring, Flooding Prediction.



Parking Occupancy Prediction



Transit Service Optimization, Fleet Management.

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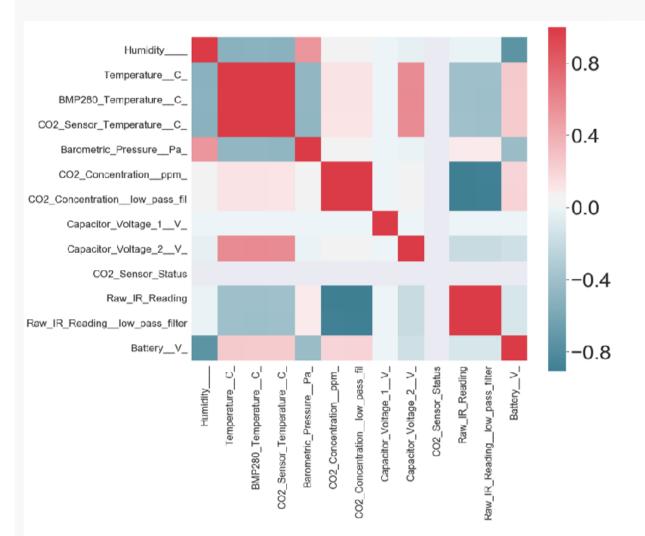
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Fredericten

API Explorer Data Insights Overview Data

Air Quality Sensor



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people-in-motion-lab.org

People in Motion

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