# Intelligence at the CloudLighting & Beyond

Omar Nasir – Helvar Oy



#### The Helvar Lighting platform.

Helvar

Leveraging cloud services to build data driven services.

















Data Streams Storing Data ETL & Services

# Understanding Lighting Data

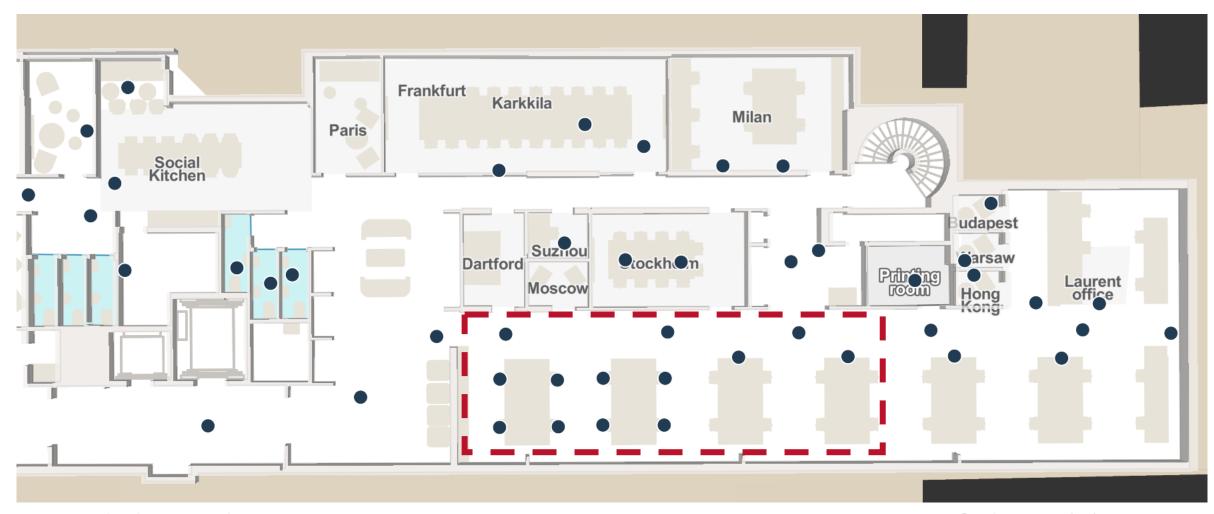
Services & Insights



#### **Understanding Lighting Data**



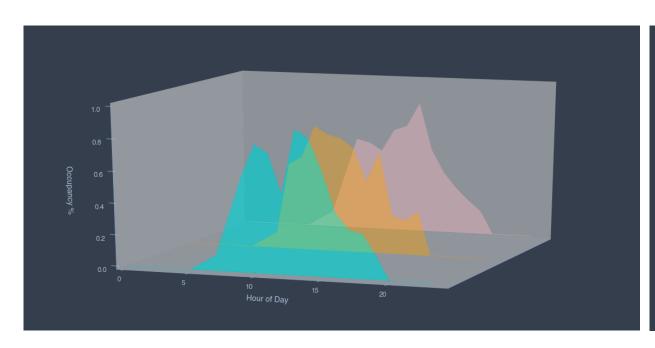
#### **Aggregating Spaces**

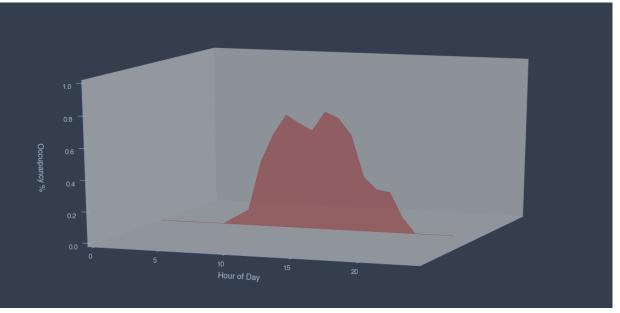


## **Understanding Lighting Data**

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#### **Aggregating Sensor Outputs**

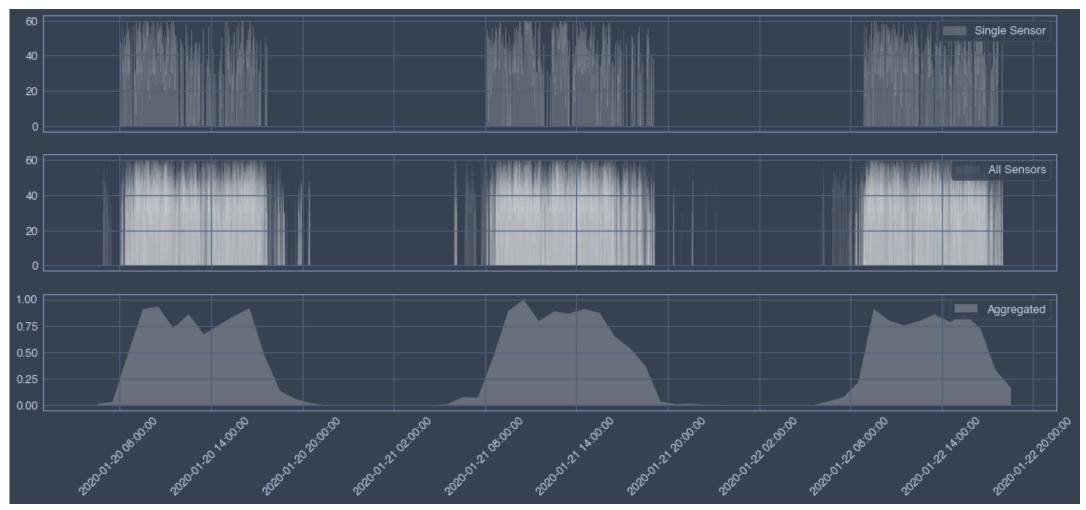




#### **Understanding Lighting Data**

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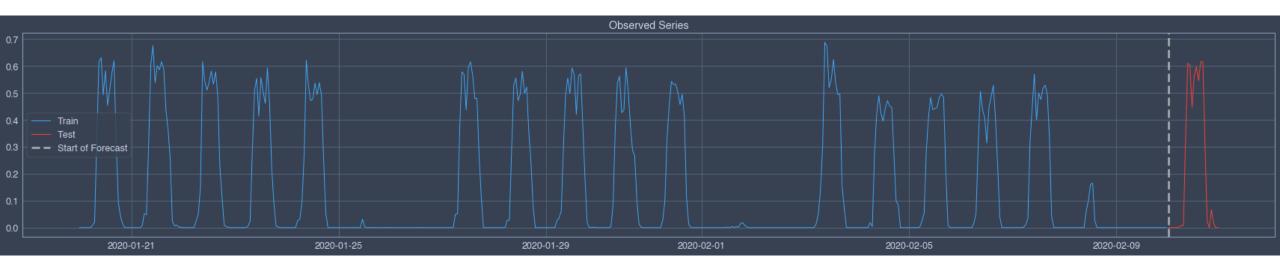
Aggregating Sensor Outputs.



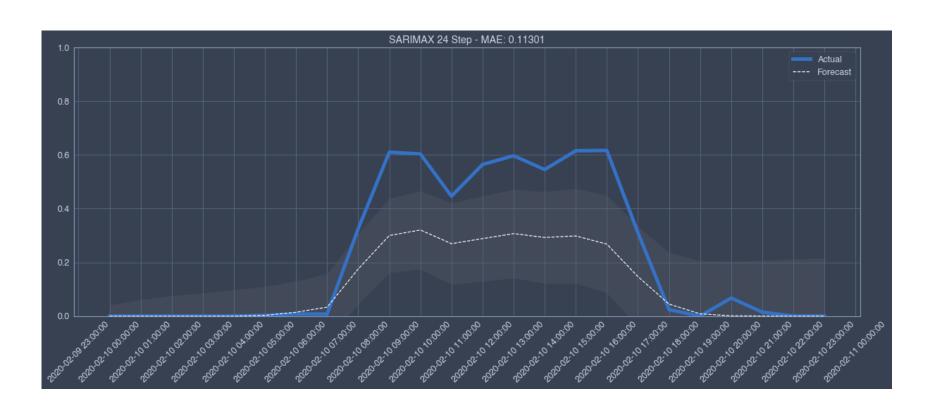
# Applications of Lighting Data



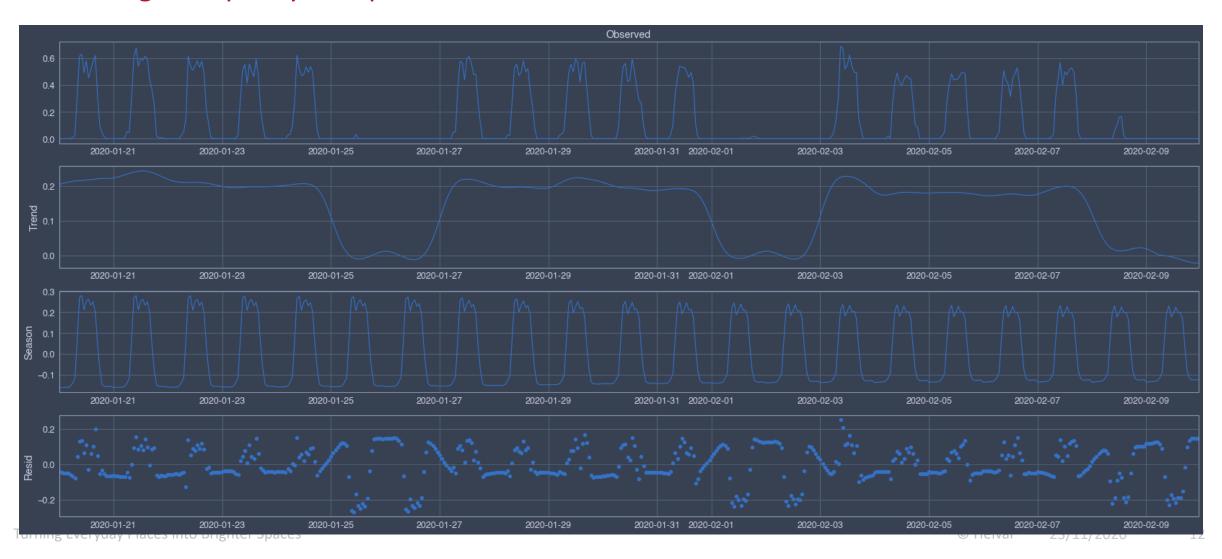
Helvar



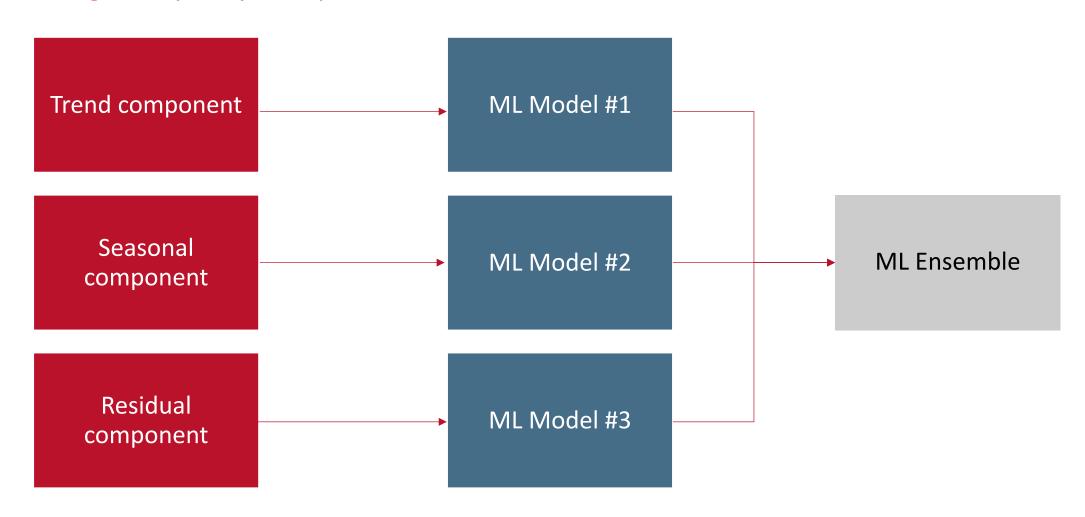
## Helvar



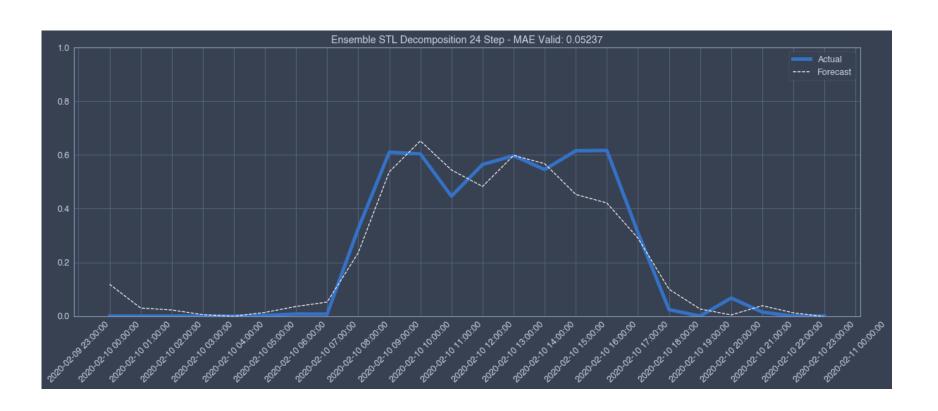
## Helvar



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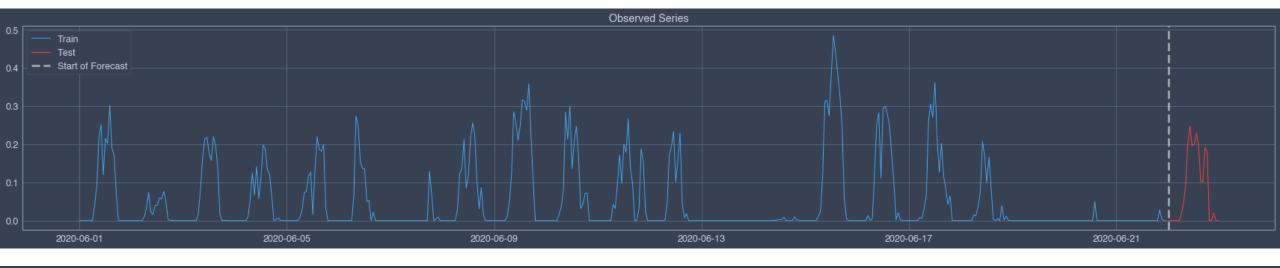


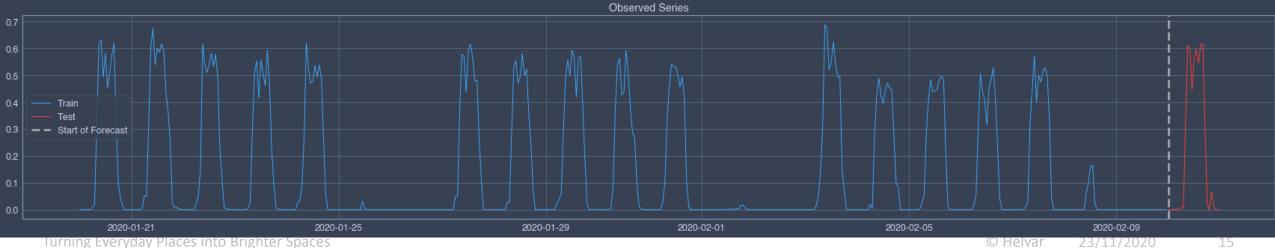
## Helvar



Helvar

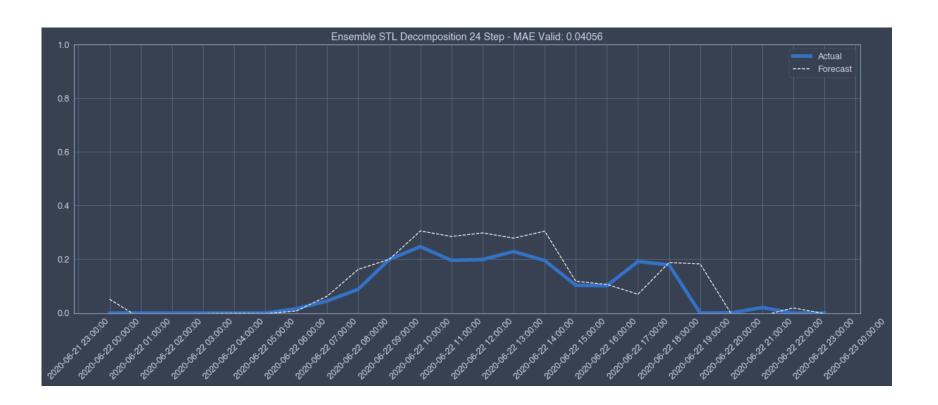
Predicting Occupancy for Spaces :: Post-Covid Occupancy Changes







Predicting Occupancy for Spaces :: Post-Covid Occupancy Changes



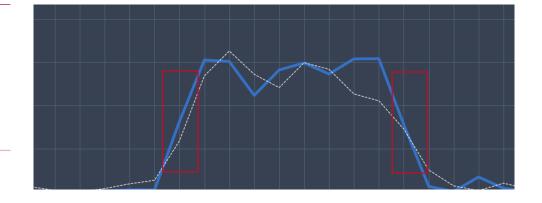
#### Benefits of Predictive Lighting



Tuning lighting parameters for energy savings

Systems (BMS)

Interfacing with other Building Management



**Utilization insights** 

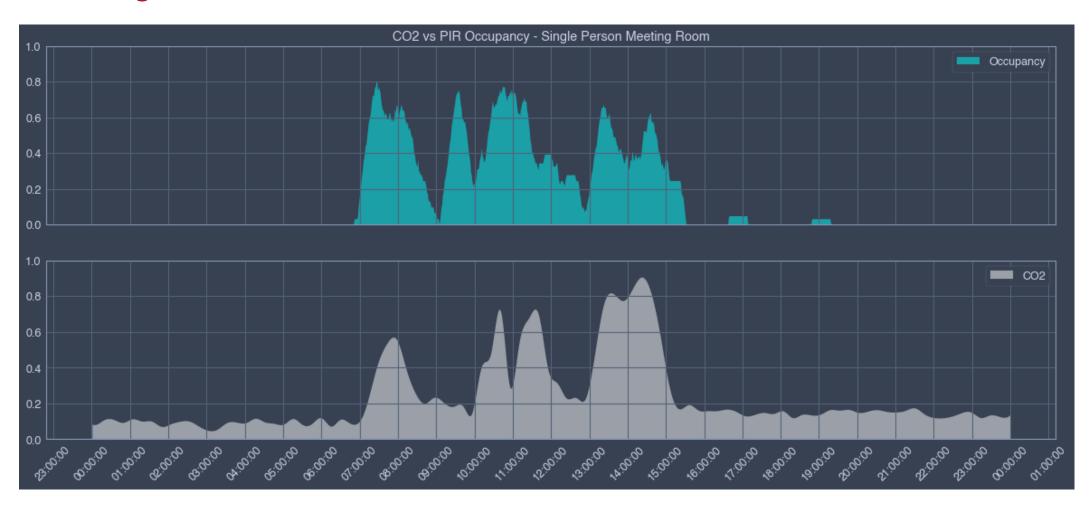
# Applications of Lighting Data

**Predictive HVAC** 



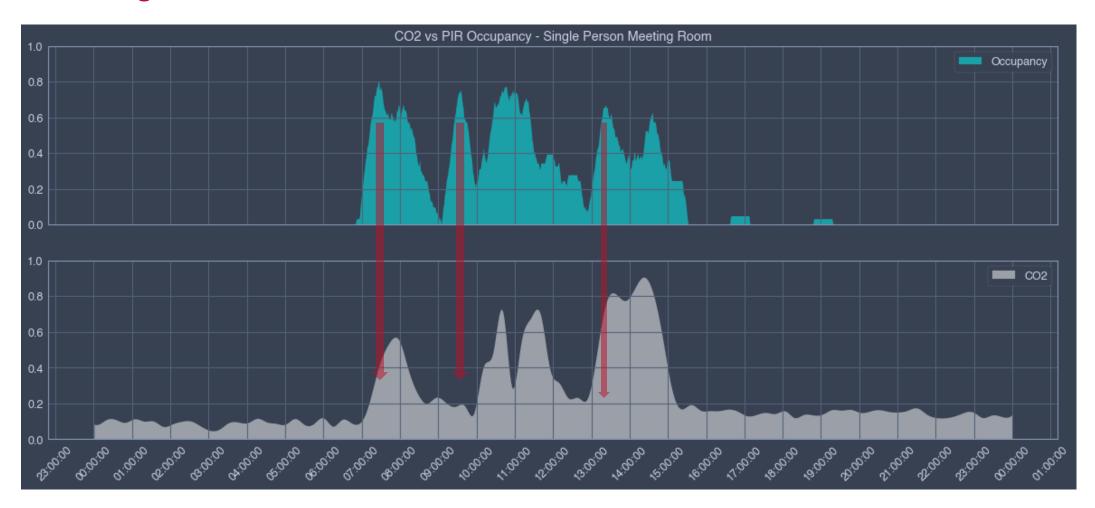
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#### **Predicting HVAC**



### Helvar

#### **Predicting HVAC**



#### Benefits of Predictive HVAC



Direct feedback loop with HVAC systems

Energy and well-being optimisation

Q/A

Thank you for Listening!

