



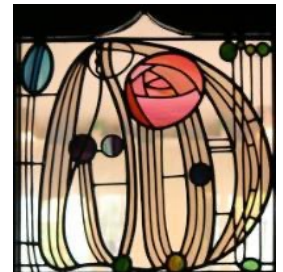
# Let's Benefit From Tons of Data... Without Having That Eat the World!

Dr. Lauritz Thamsen

Lecturer in Computer Systems

GLASS – SoCS – UofG

<https://lauritzthamsen.org>



# Data-Intensive Applications



Search



Business  
Intelligence



Telemedicine



Mobility



Recommendations



Industry 4.0



Scientific Data  
Analysis



Smart Homes

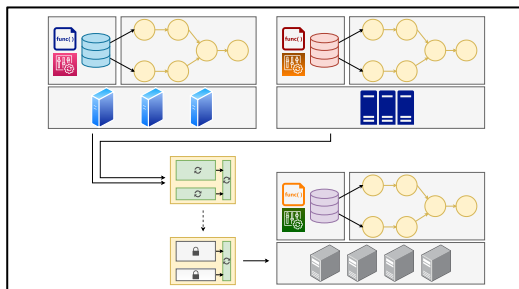


Smart Water  
Networks

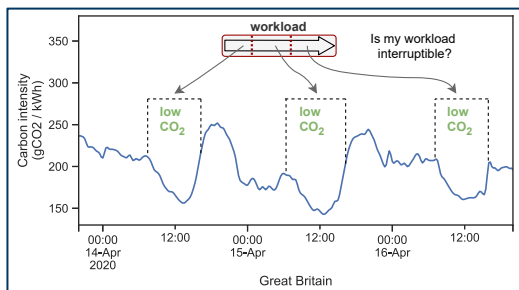


Log Analysis

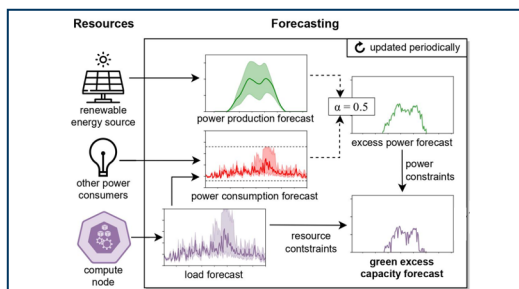
# Towards More Resource-Efficient and Sustainable Data-Parallel Processing



**“Right-sized” big data analytics:**  
Automatic configuration of jobs so they meet performance expectations efficiently



**Low-carbon cloud computing:**  
Scheduling of flexible workloads based on fluctuating carbon intensities of energy grids



**Renewable-aware distributed computing:**  
Placement of computing jobs to use green excess energy at the edge

# How to Find Me



**Office S 152** in the School of Computing Science  
<https://lauritzthamsen.org> | [@lauritzthamsen](https://twitter.com/lauritzthamsen) on twitter  
[lauritz.thamsen@glasgow.ac.uk](mailto:lauritz.thamsen@glasgow.ac.uk)