



Enterprise
Ireland



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Helmut Simonis

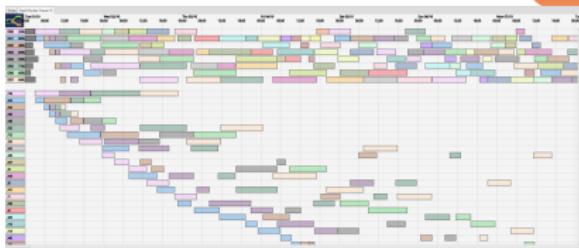
Skills Development Program



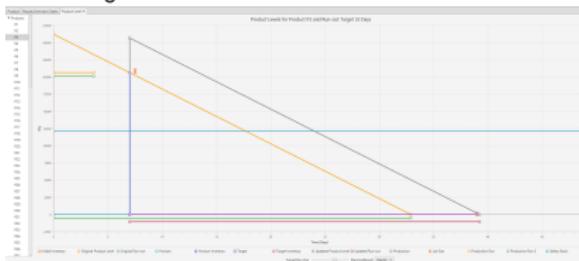
Constraint Based Scheduling



- First iteration run last week
- Presentation of problem constraints
- A generic scheduling tool
- Visualization techniques
- Industrial case studies
- Future iterations on demand



Scheduling Tool: Machine and Job Gantt Chart

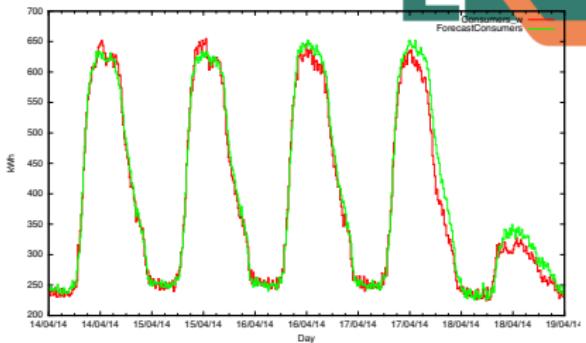


Production Planning Example

Energy Cost Management



- How to exploit time variable energy prices
- Using energy storage
- Predicting production, demand and prices
- Case studies



Predicting UCC Campus Electricity Demand
Hourly Irish Wholesale Electricity Price

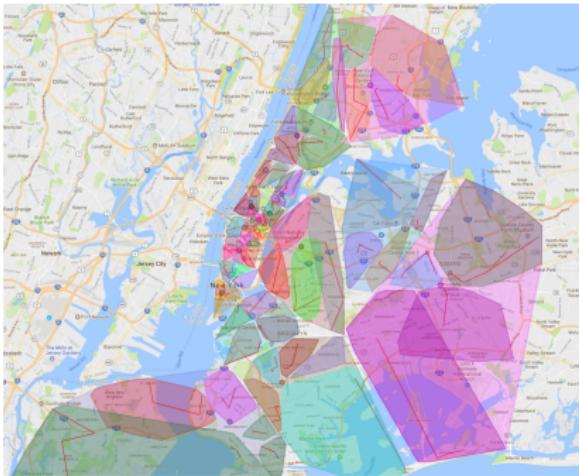


Time Variable Electricity Price

Transportation and Distribution



- Problem types
 - Tour limited
 - Capacity limited
 - On-line problems
- Predicting travel times
- Industrial case studies
 - Scheduling maintenance visits
 - Car transport in Ireland



Elevator Maintenance Planning in NYC

Rostering and Personnel Assignment



- Problem types
 - Rostering
 - Timetabling
 - Capacity planning
- Solution methods
- Case studies



Outpatient Capacity Planning Dashboard