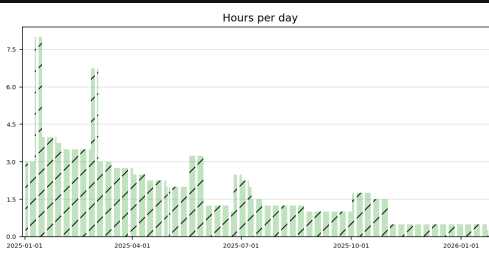
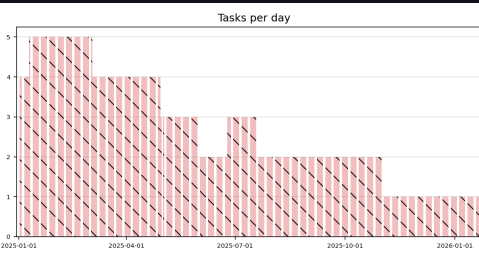
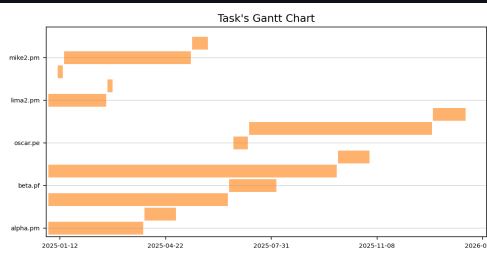


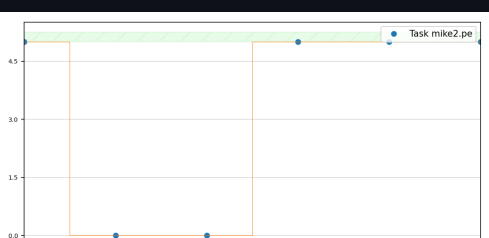
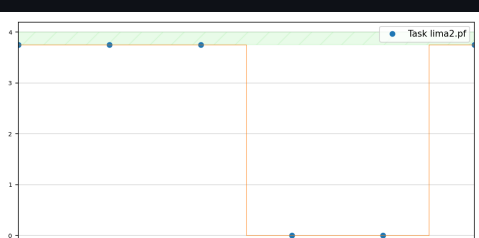
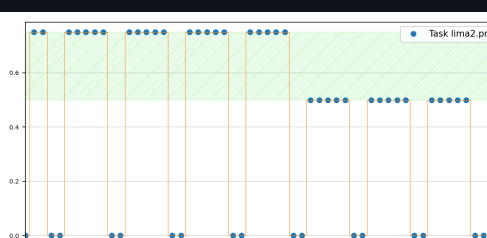
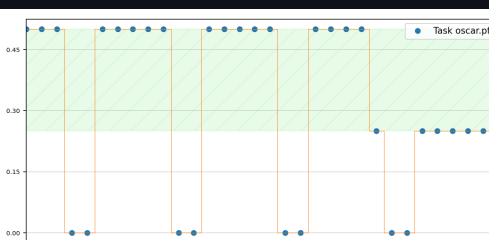
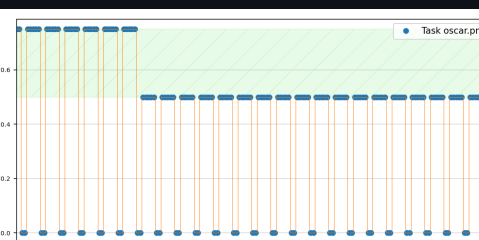
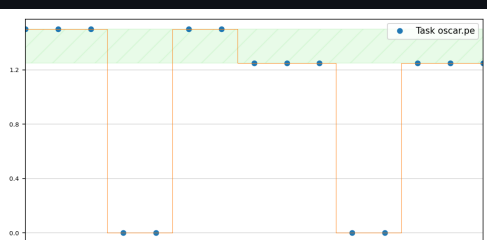
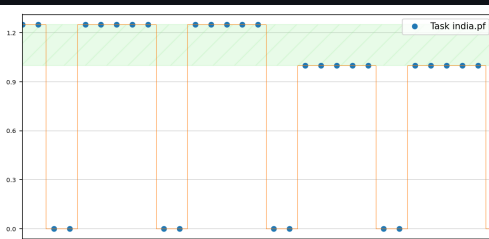
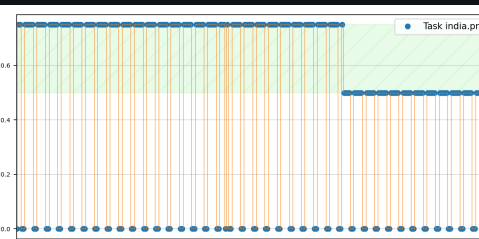
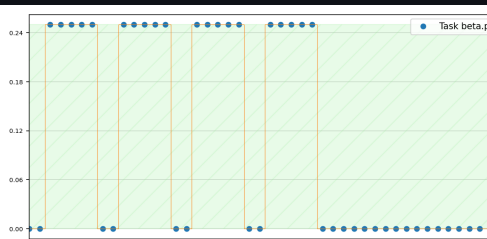
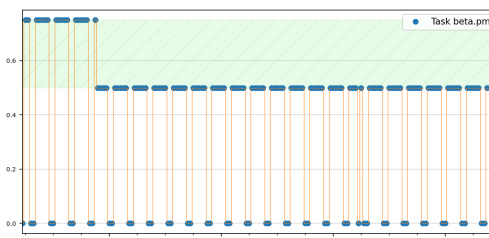
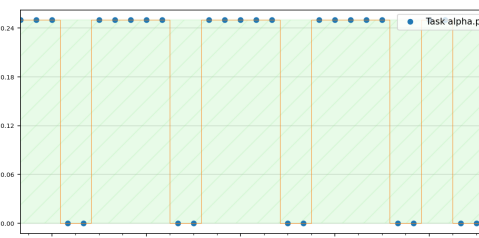
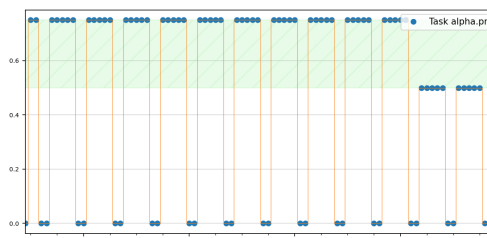
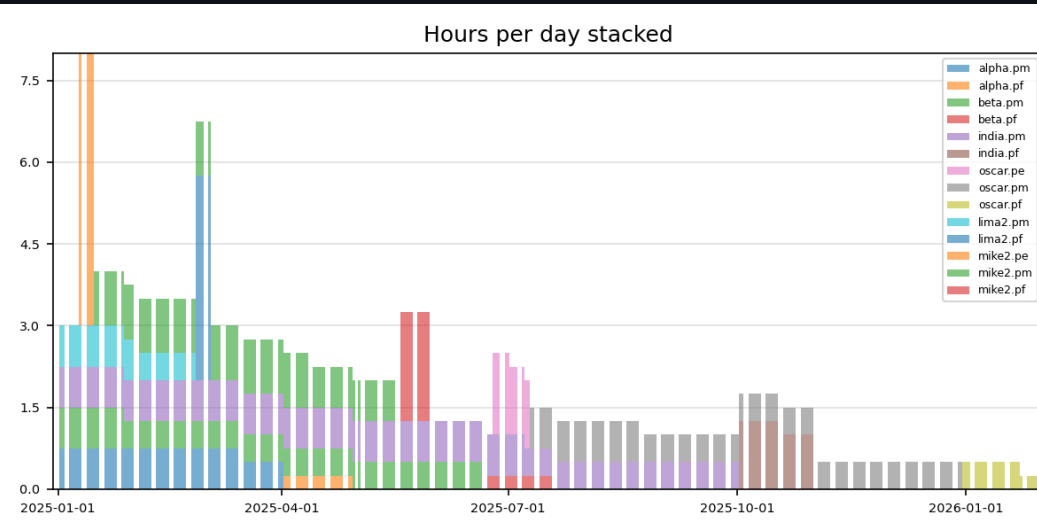
## Yumbo. Scheduling, Planning and Resource Allocation

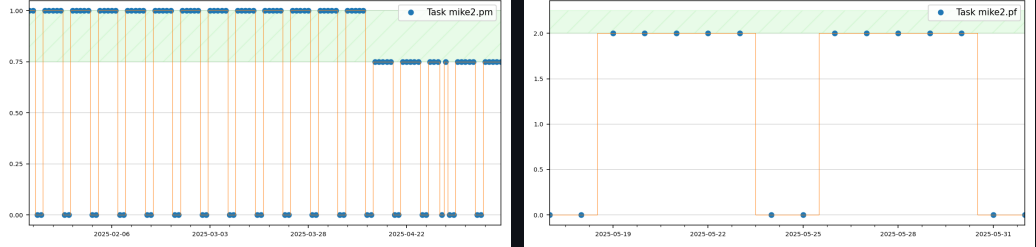
**Zbigniew Romanowski, Paweł Koczyk**

## Experts overview



## PM.Daniel the 1st unit





Solver output at 23 January 2025, 18:16:07 PM

```
HiGHS 1.8.1: tech:outlev = 1
Running HiGHS 1.8.1 (git hash: 4a7f24a): Copyright (c) 2024 HiGHS under MIT licence terms
Coefficient ranges:
  Matrix [1e+00, 3e+01]
  Cost   [1e+00, 1e+00]
  Bound  [1e+00, 2e+02]
  RHS    [2e+01, 5e+02]
Presolving model
119 rows, 792 cols, 954 nonzeros 0s
11 rows, 738 cols, 738 nonzeros 0s
11 rows, 738 cols, 738 nonzeros 0s

Solving MIP model with:
  11 rows
  738 cols (54 binary, 684 integer, 0 implied int., 0 continuous)
  738 nonzeros
MIP-Timing: 0.0054 - starting analytic centre calculation

Src: B => Branching; C => Central rounding; F => Feasibility pump; H => Heuristic; L => Sub-MIP;
P => Empty MIP; R => Randomized rounding; S => Solve LP; T => Evaluate node; U => Unbounded;
z => Trivial zero; l => Trivial lower; u => Trivial upper; p => Trivial point

Nodes | B&B Tree | Objective Bounds | Dynamic Constraints | Work
Src Proc. InQueue | Leaves Expl. | BestBound BestSol | Gap | Cuts InLp Confl. | LpIters Time

T 0 0 0 0 0.00% 6199.691376 inf 6199.691376 7465.01975 16.95% 0 0 0 11 0.0s
1 0 1 100.00% 7465.01975 7465.01975 0.00% 0 0 0 11 0.0s

Solving report
Status Optimal
Primal bound 7465.01974963
Dual bound 7465.01974963
Gap 0% (tolerance: 0.01%)
P-D integral 1.28510762743e-05
Solution status feasible
7465.01974963 (objective)
0 (bound viol.)
0 (int. viol.)
0 (row viol.)
Timing 0.03 (total)
0.00 (presolve)
0.00 (solve)
0.00 (postsolve)
Max sub-MIP depth 0
Nodes 1
Repair LPs 0 (0 feasible; 0 iterations)
LP iterations 11 (total)
0 (strong br.)
0 (separation)
0 (heuristics)

HiGHS 1.8.1: optimal solution; objective 7465.01975
11 simplex iterations
1 branching nodes
```

Elapsed time for chart creation

Chart title	Chart short name	Number of calls	Elapsed time [s]
Hours per day stacked	simg	1	7.039
Plot task with its constrains	bimg	14	2.682
Task's Gantt Chart	gimg	0	0.000
Hours per day	himg	0	0.000
Tasks per day	timg	0	0.000
Invoicing Periods Workload	wimg	0	0.000