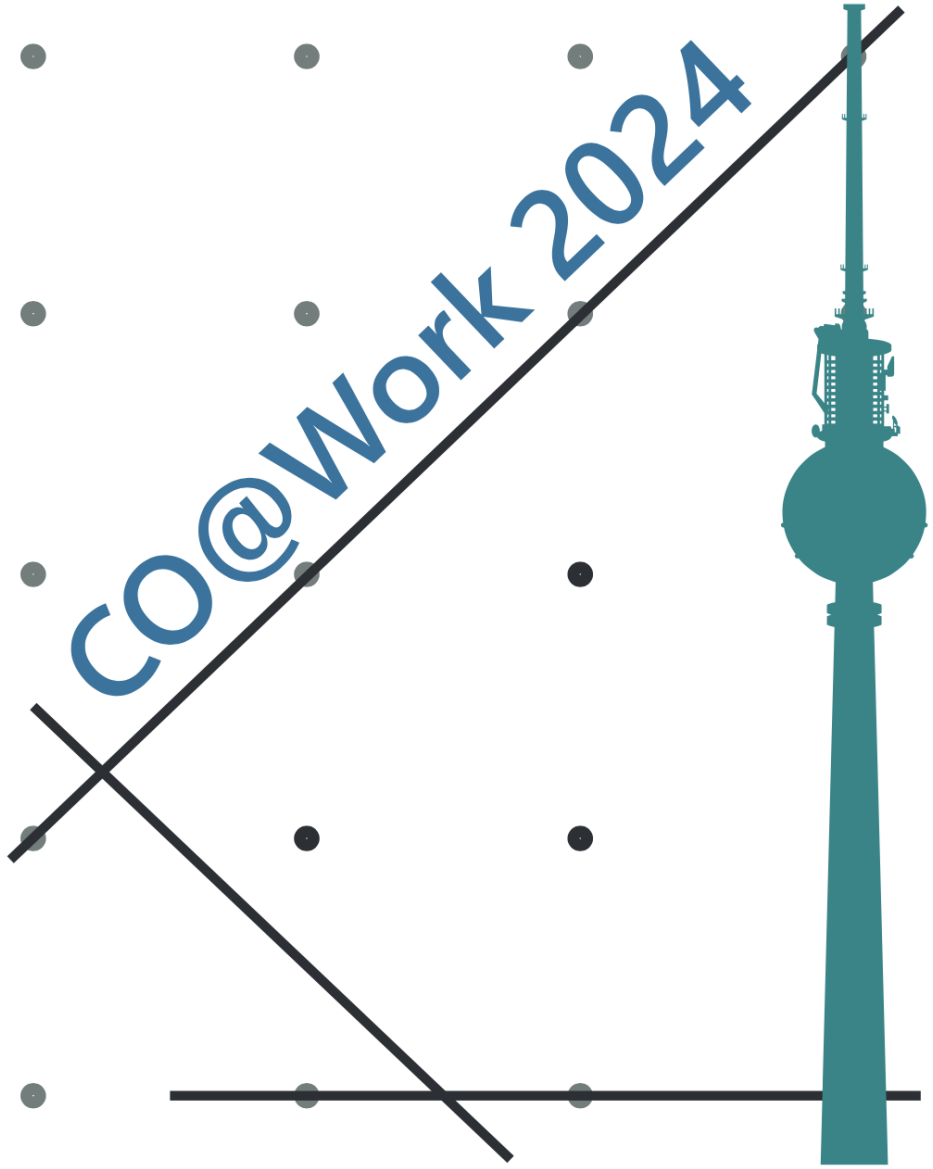
CO@Work 2024 Delivery Hero's Computational Challenge



Kai Hoppmann Baum
Delivery Hero

Milena Petkovic
IKZ Berlin, ZIB

Computational Challange:
Optimize the Future of Delivery – Delivery Hero's VRPPD Challenge

An unique opportunity to tackle a Vehicle Routing Problem with Pickup and Delivery (VRPPD) arising in the real world.

The Vehicle Rotting Problem? 🍕🤢 Well, let's hope not!
We're solving the VRPPD—figuring out how to deliver items efficiently without the food going bad!
Think you can conquer the chaos and keep the pizza fresh?
Let's see what you've got! 🚚💨

Computational Challenge: Submission

Submission deadline: Thursday, 26.09.2024. 18:00h
Email: coaw-data@zib.de
Subject: Computational Challenge Submission TeamNumber

1. Solution Description Document (PDF):
   - Filename: teamnumber_teamname_solution_description.pdf
   - Length: 1-2 pages
   - Content:
     - Final Approach: Describe final solution, model, methodology.
     - Alternative Attempts: Summary of other approaches.
     - Challenges and Solutions: Explain difficulties and solutions.

2. Solution Files (ZIP):
   - Filename: teamnumber_teamname_solutions.zip
   - Contents:
     - CSV file per test instance, named as instance name.
     - Code files (scripts, notebooks, etc.)
     - Configuration files (if applicable).
     - Any other resources required for evaluation.

Computational Challenge: Scoring

Feasibility:

- One point for each instance with a feasible solution.

Ranking:

- Top 5 objective function values get points: 10, 8, 6, 4, and 2.
- Ties: Points awarded to all teams with the same score.

And the WINNER is....

Team 5

András Czégel
Franziska Strobel
Matea Miskovic
Federico Michelotto

Computational Challenge: The Results

Team	Final Score
Team 5	532
Cool Guys	502
Dine Hard	486
Team 21	364
Squirrels	318
Pickup and eat yourself	250
CHAOS	238
Delivery HerORs	238
Liferando	230
Byte Me	222
Twelve	214
Run Fast	208
Cutting Bread	188
Lone Wolf	173
Team 15	170
The Debuggers	162
Fast for You	153
OptiTech	143
Or Maybe Team 42	140
Greedy Explorers	136
Team 14	127
your_email@example.com	107
Bolognesse Now	96
Team 9***	316
Team 19	0
Team 27	0
*** Late Submission	

Computational Challenge: The results

Instance	Team1	Team2	Team3	Team4	Team5
1	5	22	6	4	25
2	6	5	22	23	21
3	5	22	6	21	4
4	5	6	22	21	4
5	5	22	6	23	21
6	5	22	6	21	4
7	6	5	22	23	21
8	6	5	22	23	21
9	22	5	6	21	4
10	5	22	6	4	21
11	5	22	6	21	4
12	5	22	6	21	23
13	22	5	6	4	25
14	5	22	6	23	21
15	22	5	6	23	21

Rank1	Rank2	Rank3	Rank4	Rank5
40836	40839	40843	40868	40869
31806	31850	31854	32115	32277
25747	25747	25749	25756	25769
23920	23920	23922	23925	23943
23671	23694	23701	23880	24027
20595	20595	20597	20617	20651
20577	20587	20590	20893	21085
20071	20085	20085	20398	20545
19618	19619	19619	19619	19629
18474	18475	18477	18536	18539
16614	16621	16633	16764	16852
16462	16469	16516	17064	17251
15551	15552	15553	15566	15579
15378	15389	15403	15578	15657
14555	14583	14730	15359	15435

Honorable Mention

Cool Guys

Sami Halaseh
Lukas Mehl
Francesco Cavaliere
Lukas Eveborn

Dine Hard

Lisanne Heuseveldt
Oliver Voigt
Veerle van den Hurk
Dominik Krupke

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Thank You!