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The Packing While Traveling Problem

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Highlights

- We introduce a new class of nonlinear knapsack problems.
- We show that the constrained and unconstrained versions of the problem are NP-hard.
- We provide lower and upper bounds adopting piecewise linear approximation.
- We use a linearization technique to solve the problem exactly.
- We propose a branch-infer-and-bound hybrid approach to solve the problem exactly.

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