Jaykrishnan G.

Optimization Specialist

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Research Interests

- Theoretical Computer Science.

- Operations Research.

Education

The Technion – Israel Institute of Technology Haifa, Israel
DOCTOR OF PHILOSOPHY JULY 2021 – DECEMBER 2024
Advisor: Prof. Asaf Levin

The Technion – Israel Institute of Technology Haifa, Israel
MASTER OF SCIENCE MARCH 2019 – JULY 2021
Advisor: Prof. Asaf Levin

National Institute of Technology Tamil Nadu, India
MASTER OF TECHNOLOGY JUNE 2013 – MAY 2015

University of Kerala Kerala, India
BACHELOR OF TECHNOLOGY MAY 2008 – JULY 2012

Professional Experience

Optym
OPERATIONS RESEARCH SCIENTIST JANUARY 2025 - PRESENT

- Contributed to the development and roll out of Optym's state-of-the-art railway scheduling system.

Publications

1. G. Jaykrishnan and A. Levin. EPTAS for load balancing problem on parallel machines with a non-renewable resource. *Discrete Optimization*, 48:100775, 2023

2. G. Jaykrishnan and A. Levin. EPTAS for parallel identical machine scheduling with time restrictions. *Journal of Combinatorial Optimization*, 47(2):10, 2024

3. G. Jaykrishnan and A. Levin. EPTAS for the dual of splittable bin packing with cardinality constraint. *Theoretical Computer Science*, 979:114202, 2023

4. G. Jaykrishnan and A. Levin. Scheduling with cardinality dependent unavailability periods. *European Journal of Operational Research*, 316(2):443–458, 2024

5. G. Jaykrishnan and A. Levin. APTAS for bin packing with general cost structures. *Theoretical Computer Science*, 1055:115510, 2025

Technical skills

- **Languages** : Python, C++, C#, LaTeX

- **Libraries** : CVXPY, CVXOPT, PyTorch, PyG, DGL, PyTorch Lightning, Hydra

- **MLOps** : Git, DVC, GitHub, Docker, Google Cloud Platform, CI/CD