## Multiobjective **Optimization Group**

The Multiobjective Optimization Group at the University of Jyväskylä develops theories, methods and computer implementations for solving real-world decision-making problems.



optimization

The research focuses at (nonlinear) multiobjective optimization, that is, finding the best balance among conflicting objectives.

The research is inspired by the need of supporting decision making in real-world applications.

decision support

The group also develops visualizations to decision support and employs artificial intelligence and machine learning.

research area

The Group is active in the research area Decision Analytics utilizing Causal Models and Multiobjective Optimization (DEMO, jyu.fi/demo)

## **ENABLING BETTER DECISION MAKING**



The Group develops interactive, evolutionary and hybrid methods for both simulationbased and data-driven problems. The idea is to support a decision maker in finding the most preferred decision in the presence of conflicting objectives. The Group is one of the few groups that specializes in implementing old and new interactive multiobjective optimization methods.





**DESDEO** is a free open source software framework for interactive multiobjective optimization methods.

## **MEET OUR TEAM**









Its mission is to increase awareness of the benefits of interactive methods and make them more easily available and applicable.



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The framework consists of reusable components that can be utilized for implementing new methods or modifying the existing methods.

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