

# **Abstract**

## **Energy-Efficient Computing**

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Energy-efficient computing is a hot topic in times of rising energy costs and environmental awareness. As the demand for computational resources grows unabated, so does the total amount of energy spent to store, aggregate, transform, and enrich the world's digital assets. Researchers and companies alike strive for novel ways to reduce the energy consumption of today's warehouse-sized data centers.

The talk starts with an overview of the topic before showcasing possible solutions. We will touch all aspects from rethinking the entire data center, tailored infrastructure, workload analysis and migration, to server design. In the second part of the talk I will highlight research currently under way at the Systems Engineering Group (TU Dresden).