

The Waste Challenge Along Isar

Isar CleanMap + Autonomous Cleanup Robots

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The Problem

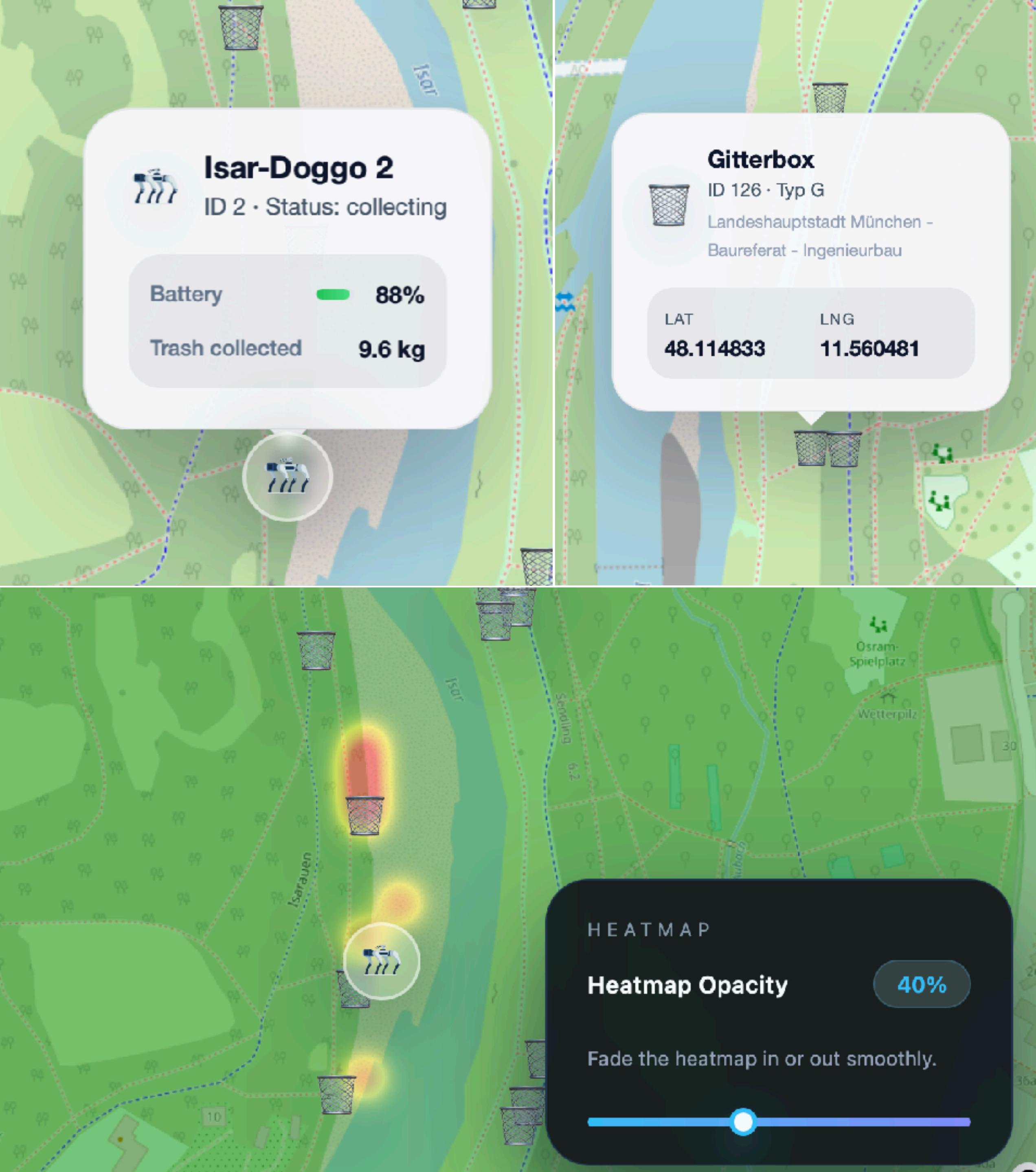
- Heavy seasonal waste accumulation
- Bins overflow quickly
- High cost and environmental impact



Our Solution

- Autonomous Robots collecting trash along the Isar
- Real-time interactive map with waste hotspots
- All public bins mapped





How It Works

- Navigating autonomously based on heat maps
- Detection and Segmentation of trash items with an AI model
- Calculating the trajectory for gripper arm
- Collecting trash into a box on the back of the robot



Images from Google Street View

Impact & Future Vision

- Cleaner environment
- Less manual labour
- Easy scalable
- Next step: Integrating it into a real robot



Thanks!