EuRoC Machine Hall (3 agents)

Compared to Related Work

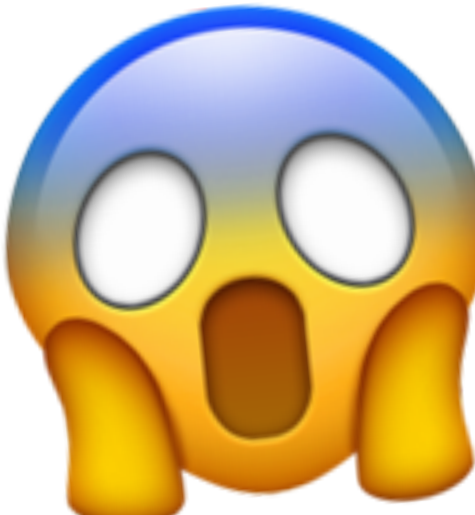
Not much work on multi-agent SLAM…

Most recent comparable system:

CCM-SLAM (2019, 178 citations)

Vision for Robotics Lab, ETH Zurich

	My System	CCM-SLAM
Dataset	EuRoC MH_01, MH_02, MH_03	
Sensors	Monocular Vision	
RMSE ATE [m]	**0.065**	0.077
Collaboration Type	Decentralized	Centralized
VO Frontend	ORB-SLAM	



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Decentralized vs. Centralized Multi-Agent SLAM

- Scalability
- Redundancy & Robustness
- No network infrastructure available in environments where multi-agent SLAM shines
  - eg. Search & Rescue, Cave exploration, etc.
  - Distributed system can use ad-hoc mesh network