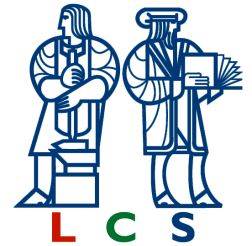




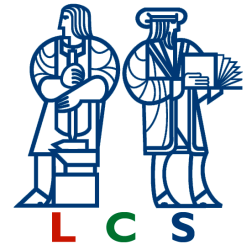
Project Overview



- Theme: decentralized, self-organizing networks
 - Easy to deploy; flexible; robust
- Area 1: Grid “ad-hoc” wireless routing protocol
 - For smart devices or rooftop networks
 - Nodes forward each others’ data
 - No infrastructure required
 - Key challenge: scale to large networks
- Area 2: Chord distributed lookup algorithm
 - Foundation for peer-to-peer applications
 - Provides distributed hash table
 - Key challenges: Internet scale, robustness

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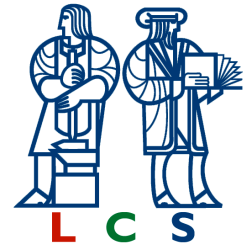


Progress Through December 2002

- Presented link-quality-aware routing paper
 - Primarily characterizing the problem
 - At HotNets conference
- Presented Ivy P2P file system paper
 - Based on Chord/DHash
 - At OSDI conference
- Explored P2P keyword indexing schemes
 - Submitted paper to IPTPS workshop

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Research Plan for the Next Six Months

- Finish link-quality-aware routing algorithm
 - Goal: submit to Mobicom conference
- Analyze Ivy file consistency semantics
 - Goal: submit proofs to PODC conference
- Build Ivy-like version control system
 - V.c. is main application of distributed file systems
 - Allow more focused semantics
- Explore more P2P indexing algorithms
 - Goal: a more scalable Gnutella