Distributed Systems

Introduction

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About me

Associate professor

- Since 2015
- LIG Laboratory

Research topics

- Reliability and efficiency of large-scale systems

- Current research work:
  - ▶ Algorithms for new memory/storage hierarchies (PMEM, CXL, disaggregation, etc.)
  - ▶ Carbon footprint of cloud platforms
  - ▶ ML approaches for optimizing distributed systems

Teaching staff

- Baptiste Lepers (`baptiste.lepers@inria.fr`)

- Thomas Ropars
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Organization of the course

- Lectures + exercises
- A final exam

Covered topics

- Fondamental problems in distributed systems

- Ordering of events

- Consensus

- Broacasting information (with different guaranties)

- Distributed transactions

- etc.

Main references

Some books than can complement the material presented in class

- *Designing Data-Intensive Applications* by Martin Kleppmann

- *Introduction to Reliable and Secure Distributed Programming* by C. Cachin, R. Guerraoui, and L. Rodrigues