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Talk Title:

Resilience Engineering in Cloud-Distributed Environments

Abstract / Profile:

Abstract: This presentation explores the theoretical foundations of resilience mechanisms within cloud-based distributed architectures. We examine the conceptual frameworks that govern system recovery in decentralized computing environments, focusing on the abstract principles of fault tolerance rather than specific implementations. The discussion frames recovery strategies through a lens of architectural trade-offs, particularly the theoretical tensions between consistency models and availability guarantees. We introduce a generalized approach to conceptualizing resilience that transcends particular technologies, addressing the fundamental challenges of maintaining system integrity across distributed boundaries. By analyzing these concepts at a theoretical level, attendees will gain insight into the underlying principles that shape effective recovery strategies, regardless of their specific technological context or implementation details.