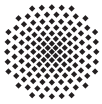

Universität Stuttgart

RSS
Reliable Software Systems

Software Engineering Seminar (SoSe 2016)

Resilience Engineering: On GameDays, Error Monkeys, and Armies

Resilient systems are the systems that can continuously provide their services despite the present of unexpected problems at runtime. Resilience engineering aims to test the system by intentionally introducing problems, such as delay or sudden node crash, in testing or production environments to make sure that all parts of the systems can handle such situation.

This seminar paper should *i.)* provide an introduction into the topic of software resilience engineering in general and *ii.)* elaborate in more detail current approaches and tools such as Netflix's Simian Army.

In addition to studying and summarizing the research literature, it is a mandatory part of this seminar to gather and share hands-on experience with the available tooling infrastructure. The provided references are to be considered a starting point and it is expected to extend the literature search and present a coherent view on the current state of the art in this area.

References

[1] Resilience engineering: Learning to embrace failure — A discussion with jesse robbins, kripa krishnan, john allspaw, and tom limoncelli. *Commun. ACM*, 55(11):40–47, November 2012.

[2] Kripa Krishnan. Weathering the unexpected. *Commun. ACM*, 55(11):48–52, November 2012.

[3] Netflix. The Netflix Simian Army. `https://github.com/Netflix/SimianArmy/wiki`.

Contacts

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