

# Seminararbeit

Dynamische Programmanalysen für nebenläufige Programme - Data  
Race Prediction mit TSan

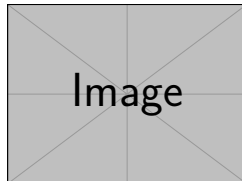


Frank Ling

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- ➊ Introduction
- ➋ Background
- ➌ FastTrack
- ➍ TSan
- ➎ Conclusion

- What are data races?
- Why fix data races?
- How to detect data races?



- dynamic data race prediction
- vector clocks
- epochs
- Lamport's HB relation







# Conclusion