

# PER FUCHS

## Pursuing a PhD in Graph Database Systems

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## EDUCATION

### M.Sc. in Parallel and Distributed Computer Systems

#### Vrije Universiteit Amsterdam

📅 Sept 2017 – Nov 2019

- Master thesis about parallel, worst-case optimal join algorithms in Spark, presented LDBC workshop Sigmod (2019), published GRADES-NDA (2020)
- Overall average: 9.0 out of 10.0
- System and research-oriented master with strict admission criteria
- Implemented a system to measure the performance of a fault-tolerant termination detection algorithm on two different basic algorithms distributed over 2000 workers, grade 9.0, technical report see GitHub

### B.Sc. in Computer Science

#### University of Passau

📅 Oct 2012 – Nov 2015

- Overall Result: 1.6 (on a scale from 1 (best) to 6 (worst))
- Bachelor Thesis 'Detection of DoS Attacks in NodeRED' written in English, grade: 1.0

## WORK EXPERIENCE

### Programmer

#### ShiftLeft

📅 May 2017 – Aug 2017

📍 Berlin

- Fully responsible for architecture and development of a JavaScript static analysis engine within a general code analysis framework
- Delivered a complete and well-tested module in three month time; even though I had to learn Scala from scratch

### Full stack developer

#### Pacific Edge Limited

📅 May 2016 – Feb 2017

📍 Dunedin, New Zealand

- Developing laboratory software for cancer diagnosis tests
- Full stack web developing with Django
- Improving release and deployment processes from a completely manual process to widely automated process by introducing Jenkins

### Frontend Developer

#### Onelogic

📅 April 2015 – Oct 2015

📍 Passau, Germany

### Web Developer

#### Adiwidjaja Teamworks

📅 Sept 2010 – Feb 2015

📍 Ahrensburg, Germany

## PUBLICATIONS

- Per Fuchs, Peter Boncz and Bogdan Ghit "EdgeFrame: Worst-Case Optimal Joins for Graph-Pattern Matching in Spark". In: GRADES-NDA workshop at SIGMOD (2020)
- Per Fuchs, Pieter Hijma and Clemens Grelck. "Implementing stencil problems in Chapel: an experience report". In: *Proceedings of the ACM SIGPLAN 6th on Chapel Implementers and Users Workshop*, pp.16–25, 2019.

## STRENGTHS

Independent Worker    Fast Learner

Looking for Challenges

Scala    Python    Java    C    C++

Chapel

Distributed Algorithms    Parallelization

Static Code Analysis    Fault Tolerance

MPI    Spark

## LANGUAGES

German    ●●●●●

English    ●●●●●

## REFEREES

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