LUKAS RETSCHMEIER

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EDUCATION

University of Copenhagen (KU), Providentia, BARC since 2023
Doctor of Philosophy (PhD), *Differential Privacy*
Supervisor: Prof. Rasmus Pagh

Technical University of Munich (TUM) 2023
Master of Science, CS, *Algorithms and Complexity* *GPA 1.6*
Supervisor: Prof. Paloma Thomé de Lima

Additionally Exchange semesters at UiB (Bergen) and ITU (Copenhagen);
Interdisciplinary Project: Musicology LMU (Munich)

Cooperative State University Mannheim (DHBW) 2018
Bachelor of Science, CS *GPA 1.4*
Supervisor: Prof. Karl Stroetmann
Dual study degree program: Combining work and study simultaneously.

Additionally Courses by *Siemens Professional Education*

PROFESSIONAL EXPERIENCE

Atos Information Technology, *Munich* 2015 - 2023
IT Consultant PLM
Years of experience in PLM consultancy and agile software development in the automotive and home appliance industries
Responsibilities: Technical lead and solution design — PLM consultancy focused on *Siemens Teamcenter* — Research & Development — **additionally**: mentoring of students and support of bid processes
Other roles: Junior IT Consultant (2018 - 2023), dual-track student (2015 - 2018)

Academic Work Experience
Teaching Assistance: Discrete Structures (W21), Algorithms and Data Structures (W23, W24)
Research Assistance: DHBW Mannheim, Optes project (2016 - 18)

LANGUAGES & CERTIFICATIONS

German, (Native); **English** (highly proficient, C1); **Danish** (proficient B2-C1, Prøve i Dansk 3); **Norwegian** (intermediate, B1); **(Latin)**

ITIL®3 Foundation (APMG), Business English Level 2 (LCCI)

HONORS

Best bachelor graduate in informatics
A first prize in the piano competition *Jugend Musiziert*

PUBLICATIONS *All author lists are in alphabetical order by convention*

[LL25] Christian Janos Lebeda and **Lukas Retschmeier**. "The Correlated Gaussian Sparse Histogram Mechanism". In: FORC (2025). arXiv: `2412.10357 [cs.DS]`.

[Pag+25] Rasmus Pagh, **Lukas Retschmeier**, Hao Wu, and Hanwen Zhang. "Optimal Bounds for Private Minimum Spanning Trees via Input Perturbation". In: PODS (2025). arXiv: `2412.10130 [cs.DS]`.

Under Submission

[APL25] Anders Aamand, Rasmus Pagh, and **Lukas Retschmeier**. "New Bounds for Private Graph Problems using Input Perturbation". 2025.

[And+25] Joel Daniel Andersson, Boel Nelson, Rasmus Pagh, and **Lukas Retschmeier**. "Lossless Multiple Release". 2025.

[Luk23] **Lukas Retschmeier**. "On the Parameterized Complexity of Semitotal Domination on Graph Classes". (Grade 1.0). Master's Thesis. Technical University Munich together with IT University Copenhagen, 2023. URL: `https://www.lukasretschmeier.de/docs/papers/mt.pdf`.

[Luk18] **Lukas Retschmeier**. "Development and Evaluation of an Information Retrieval System for the support of the operation of PLM systems". (Grade 1.0). BA Thesis, in German. Bachelor's Thesis. Cooperative State University (DHBW) Mannheim, 2018. URL: `https://www.lukasretschmeier.de/docs/papers/bachelorthesis-retschmeier.pdf`.

The stronger results of [Pag+25] has superseded the following work:

[PL24] Rasmus Pagh and **Lukas Retschmeier**. "Faster Private Minimum Spanning Trees". In: (2024). arXiv: `2408.06997 [cs.DS]`.

PROJECTS

B/S/H — Technical Lead & Developer — *Home Appliances* 2021 - 23
Enabling real-time monitoring and error detection by consolidating production line.
Technologies: Full *JHipster* stack including *Java* (with *Spring*), *AngularJS*

Mercedes-Benz — PLM Developer & Consultant — *Automotive Industry* 2019 - 21
Development of a central after-sales platform. *I specialized in developing a toolchain for validating, converting, and rendering different media files and integrating them into the Teamcenter landscape.*
Technologies: *Java*, *Docker*, *Siemens Teamcenter*

BMW — Junior PLM Developer & Consultant — *Automotive Industry* 2018 - 19
PoC of a direct upgrade from Teamcenter 10.3 to 12.1 using containerization for speeding up the process
Technologies: *Java*, *Docker*, *C++*