

Mugdha Khedkar

PhD Student, Secure Software Engineering
Heinz Nixdorf Institut
Universität Paderborn
33102 Paderborn, Germany

Webpage: <https://mugdhak30.github.io>

Email ID: mugdha.khedkar@upb.de

ACADEMIC DETAILS

| Examination | Institute | Year | % Marks |
|-------------------------------------|--|------|----------------|
| M.Sc. Computer Science | Chennai Mathematical Institute (India) | 2020 | 8.25/10 (CGPA) |
| B.E. Computer Engineering | Cummins College of Engineering, Pune (India) | 2017 | 73 |
| All India Senior School Certificate | Kendriya Vidyalaya, IIT Powai (India) | 2013 | 94.6 |
| All India Secondary School | Kendriya Vidyalaya, IIT Powai (India) | 2011 | 96.2 |

RESEARCH INTERESTS

- Static Program Analysis, Data Privacy and Protection, Usability

PUBLICATIONS

- **Mugdha Khedkar**, Ambuj Kumar Mondal, and Eric Bodden. 2024. Do Android App Developers Accurately Report Collection of Privacy-Related Data? In Proceedings of the 39th IEEE/ACM International Conference on Automated Software Engineering Workshops (ASEW '24). Association for Computing Machinery, New York, NY, USA, 176–186. (<https://doi.org/10.1145/3691621.3694949>)
- **Mugdha Khedkar**, Michael Schlichtig, and Eric Bodden. 2024. Advancing Android Privacy Assessments with Automation. In Proceedings of the 39th IEEE/ACM International Conference on Automated Software Engineering Workshops (ASEW '24). Association for Computing Machinery, New York, NY, USA, 218–222. (<https://dl.acm.org/doi/10.1145/3691621.3694953>)
- **Mugdha Khedkar** and Eric Bodden. 2024. Toward an Android Static Analysis Approach for Data Protection. In Proceedings of the IEEE/ACM 11th International Conference on Mobile Software Engineering and Systems (MOBILESoft '24). Association for Computing Machinery, New York, NY, USA, 65–68 (<https://dl.acm.org/doi/10.1145/3647632.3651389>).
- Mugdha Khedkar. Static Analysis for Android GDPR Compliance Assurance. 2023 IEEE/ACM 45th International Conference on Software Engineering: Companion Proceedings, Melbourne, Australia, 197–199. (<https://ieeexplore.ieee.org/document/10172684>).

INVITED TALKS AND WORKSHOPS (SELECTED)

- From Pain Points to Automation: Support for Privacy Assessments, European Privacy KnowledgeNet (IAPP), 2025.
- Static Analysis for Android GDPR Compliance, Cybersecurity Center (TU Wien), 2025.
- Towards Static Analysis for Android GDPR Compliance, College of Engineering (University of California Davis), 2024.

ACADEMIC SERVICES

- PC Member: STATIC 2026, ASE 2025 Tool Demonstrations, ASE 2024 Tool Demonstrations
- Journal Reviewer: IEEE Transactions on Software Engineering, Journal of Software: Evolution and Process, Information and Software Technology
- Magazine Reviewer: IEEE Software

- Junior PC Member: MSR 2023 Technical Track
- Mentor: Universität Paderborn perspective M program (Nov 2021 - April 2022)
- Student Volunteer: ASE 2024, ASE 2021
- Participant: 4th Summer School on Security Testing & Verification 2025, Dagstuhl Research Methods Seminar 2023

TEACHING ASSISTANCE

- Secure Software Engineering: Summer 2025, Summer 2024
Universität Paderborn (Bachelor course)
- Seminar Secure Systems Engineering: Winter 2023, Summer 2023
Universität Paderborn (Master course)
- Designing Code Analyses for Large-scale Software Systems I: Winter 2022, Winter 2021
Universität Paderborn (Master course)
- Designing Code Analyses for Large-scale Software Systems II: Summer 2022, Summer 2021
Universität Paderborn (Master course)

WORK EXPERIENCE

- Project Research Assistant, Centre for Formal Design and Verification of Software (CFDVS)
Dept of Computer Science and Engg, IIT Bombay (July 2017 - July 2018).
 - PI: Prof. Supratik Chakraborty
 - Objective: To develop a language to enable Dynamic Interleaving of reachability algorithms to outperform not only the individual algorithms, but also other state-of-the-art tools.

INTERNSHIPS

- With Prof. Eric Bodden, Heinz Nixdorf Institut, Universität Paderborn as part of Master's thesis work.
 - Objective: To study soundness and precision of call graph construction algorithms for Spring framework.
 - Some useful observations were made regarding soundness of call graphs constructed by existing algorithms.
 - A new concept for hybrid analysis algorithm was presented to ensure soundness in constructed call graphs.
 - My thesis is available here.
- With Prof. Deepak D'Souza, Dept of Computer Science and Automation, IISc Bangalore (May - July 2019).
 - Objective: To study techniques for data race detection in Android.

INTERESTS AND HOBBIES

- Poet of more than 275 English poems some of which have been published on web.
(URL : <https://allpoetry.com/Mugdhak>)
- Author of a blog where I share my travel experiences:
(URL: <https://mugdhak30.github.io/year-archive/>)
- A member of the CMI Literature Club (2018-2020).
- A member of the Editorial team of the Cummins College newsletter "The Wordsmith" (2013-2016).