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
- Artifact Evaluation Committee Member: USENIX 2026
- 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 perspeEktIve 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).