


AMAN SHARMA

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 <https://algomaster99.github.io/>

 <https://github.com/algomaster99>

EDUCATION

KTH Royal Institute of Technology

 February 2023 – January 2028

 Stockholm, Sweden

- PhD student in Computer Science

Indian Institute of Technology, Roorkee

 July 2017 – September 2021

 Uttarakhand, India


- Bachelor of Technology

PUBLICATIONS

1. Causes and Canonicalization of Unreproducible Builds in Java, Aman Sharma, Benoit Baudry, Martin Monperrus In *IEEE Transactions on Software Engineering* 2025
2. Maven-Hijack: Software Supply Chain Attack Exploiting Packaging Order, Frank Reyes, Federico Bono, Aman Sharma, Benoit Baudry, Martin Monperrus
3. Challenges of Producing Software Bill of Materials for Java, Musard Balliu, Benoit Baudry, Sofia Bobadilla, Mathias Ekstedt, Martin Monperrus, Javier Ron, Aman Sharma, Gabriel Skoglund, César Soto-Valero, Martin Wittlinger In *IEEE Security & Privacy* 2023

WORK EXPERIENCE

Google


 August 2025 - October 2025

 New York City, USA

- Worked as a student researcher.
- Contributed to OSS-Rebuild project, adding support for automatic rebuilds of Java packages.

KTH Royal Institute of Technology


 November 2021 - January 2023

 Stockholm, Sweden

- Worked as a research engineer in ASSERT Research Group.
- Contributed to Sorald which is an automatic program repair tool for SonarQube static analysis warnings.
- Built collector-sahab which augments the static diff with runtime information.

Google Summer of Code

 2 times: May-July 2020 and May-July 2019

 Remote

- Worked with Accord Project and Vega Project at University of Washington respectively.
- Added visualization sharing functionality in Vega Editor
- Created a MS Word add-in to import smart contracts into document.

AWARDS

ACM SCORED 2025 Distinguished Paper Award

TEACHING EXPERIENCE

I have been a teaching assistant for the courses: 1) DD2482 Automated Software Testing and DevOps, 2) DD2385: Computer Security, 3) DD1385: Software Engineering, 4) DD1310: Programming Techniques, and 5) DH2642 Interaction Programming and the Dynamic Web

TECHNICAL PROJECTS

sbom.exe

- Tool with a goal to provide runtime integrity for Java applications.
- Paper: <https://arxiv.org/abs/2407.00246>
- Tool: <https://github.com/chains-project/sbom.exe>

collector-sahab

- It augments the static line-based diff with runtime information about variable value changes in two executions of a Java program.
- Paper: <https://arxiv.org/abs/2212.11077v2>
- Tool: <https://github.com/ASSERT-KTH/collector-sahab/>

sorald

- It automatically repairs static analysis warnings reported by SonarQube.
- Paper: <https://arxiv.org/abs/2103.12033>
- Tool: <https://github.com/ASSERT-KTH/sorald/>

sbom-2023

- A dataset of 156 SBOMs that were studied for the quality of dependency list they produce.
- Paper: <https://arxiv.org/abs/2303.11102>
- Tool: <https://github.com/chains-project/SBOM-2023>

TALKS

- JFokus 2025 [slides]
- ICSE 2024 [slides]
- EclipseCon 2022 [video] [slides]
- SciPy India 2019 [video] [slides]
- More on <https://algomaster99.github.io/talks/>

REFERENCES

Martin Monperrus

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Benoit Baudry

Professor

Université de Montréal

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<https://softwarediversity.eu/>