





## Trade-Offs Between Efficiency and Security in Al-Assisted Software Development

A Mixed-Methods Study of Developer Perceptions and Code Vulnerability Analysis

Bachelor of Science Thesis in Software Engineering and Management

Department of Computer Science and Engineering UNIVERSITY OF GOTHENBURG CHALMERS UNIVERSITY OF TECHNOLOGY Gothenburg, Sweden 2025





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## Trade-Offs Between Efficiency and Security in AI-Assisted Software Development

Evaluating Developer Perceptions and Security Verification Methods in AI-Generated Code

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