In many enterprises, the number of deployed applications is constantly increasing. Those applications – often several hundreds – form large software landscapes. The comprehension of such landscapes is frequently impeded due to, for instance, architectural erosion, personnel turnover, or changing requirements. Therefore, an efficient and effective way to comprehend such software landscapes is required.

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In this thesis, we introduce a live trace visualization approach to support system and program comprehension in large software landscapes. Our main contributions are 1) an approach named ExplorViz for enabling live trace visualization of large software landscapes, 2) a monitoring and analysis approach capable of logging and processing the huge amount of conducted method calls in large software landscapes, and 3) display and interaction concepts for the software city metaphor beyond classical 2D displays and 2D pointing devices. ExplorViz is available as open-source software on www.explorviz.net.



Florian Fittkau received the BSc and MSc degrees in computer science from the Kiel University. Afterwards, he has been a Ph.D. student and researcher with the Software Engineering Group at Kiel University where he has worked on the presented ExplorViz approach. His research interests include software visualization, HCI, cloud computing, and empirical methods.

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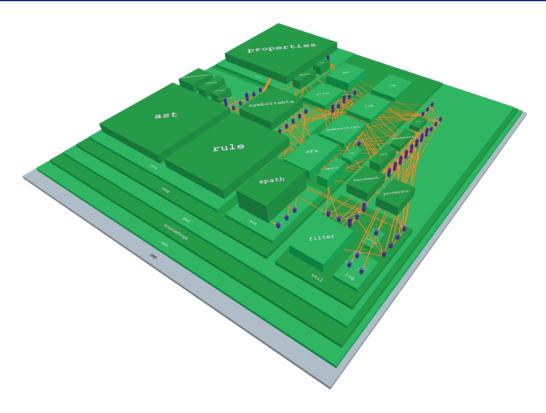
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