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## UDB: An Agent-Oriented Source-Level Debugger

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**Abstract:** Standard debuggers are usually limited in the amount of analysis that they perform in order to assist with debugging. This paper presents UDB, an agent-oriented source-level debugger for the Unicon programming language with a novel architecture and capabilities. UDB combines classical debugging techniques such as those found in GDB with a growing set of extension agents. UDB demonstrates the feasibility of a source-level debugger built on top of a very high level event-based monitoring framework. The debugger is easily extended with new debugging agents that can employ a wide range of automatic debugging and dynamic analysis techniques.