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## **Code Buddy**

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**Abstract:** Software development is inherently linked to the challenge of finding and fixing bugs in code. This research explores alternative methods of code debugging and debugging, aimed at increasing code quality, reducing development time, reducing software failures We provide a multi-faceted, AI-powered bug-finding project detection, and proactive prevention strategies are providing.

**Keywords:** Code error detection, static analysis, dynamic analysis, intelligent assistance, proactive prevention, software quality, developer productivity

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