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Sommario/riassunto

The Ada programming language was created by the U.S. Department of Defense (DOD) nearly two decades ago to provide a general-purpose programming language for defense and commercial use, but has evolved into a niche solution for safety-critical systems, primarily in defense applications. Ada and Beyond presents an approach for the DOD to move beyond the debate over its policy that requires the use of Ada for all new software development. It describes the importance of the software engineering process and recommends to DOD mechanisms for more effective review of software development and improved collection of data on software project outcomes. The volume also analyzes the technical, empirical, and business cases for using Ada and other programming languages, makes recommendations regarding the appropriate conditions under which DOD should continue to require the use of Ada, and details activities that require funding by DOD in order for Ada to remain a viable programming language.