Press Release

CAST Announces AI Agent Beta for Tech Debt and Modernization

AI director executes first-of-a-kind remediation of large application codebase

Paris and New York – March 12, 2025 - CAST, a leader in software mapping and intelligence technology, today announced applications are open for its beta "AI director." This expanded access follows successful field tests where AI was used to remediate large scale existing code, marking a first-of-its kind achievement in the IT industry.

Historically, AI has been used to generate new code, but due to its probabilistic nature, attention dilution, and context window limitations, large language models (LLMs) have not been able to soundly understand and more safely modify very large codebases comprised of millions of lines of code. Approximately 80% of code work done by companies involves maintaining or modernizing codebases of this scale.

"AI is brilliant at guessing its way to new code," said Olivier Bonsignour, Head of R&D at CAST. "But it doesn't matter how smart you are if you don't have the facts about what you're trying to improve. Our AI director takes the facts that CAST sources from source code. It then feeds this deterministic metadata to AI agents such as Princeton's SWE-agent, along with insights about the application's deficiencies. The CAST-informed AI agent can then propose a new, remediated version of the deficient parts of the application."

Flaws are a routine occurrence in any code creation process. While most are not severe enough to justify repair, they collectively create significant drag on corporate performance. Worldwide, technical debt is estimated to exceed $1.5 trillion. If AI is prompted with the information needed to fix large scale existing code, the economics of IT could change by orders of magnitude. Today, a human fixing 10 flaws could cost 100 hours. Using this approach, AI could repair 100 flaws in 10 minutes.

"CAST went line-by-line across the technology stack of several of our applications, distilling their objects and dependencies" said Paul Beswick, Global CIO and COO at Marsh McLennan. "This information was then used by the AI to fix issues and reduce the technical debt in the software. Hundreds of objects requiring coding changes were remediated, and a process that could have taken a few months was cut to a few minutes."

Users can request an invitation to the beta at https://castsoftware.com/aibeta.

About CAST

Businesses move faster using CAST technology to understand, improve, and transform their software. Through semantic analysis of source code, CAST produces 3D maps and dashboards to navigate inside individual applications and across entire portfolios. This intelligence empowers executives and technology leaders to steer, speed, and report on initiatives such as technical debt, GenAI, modernization, and cloud. As the pioneer of the software intelligence field, CAST is trusted by the world's leading companies and governments, their consultancies and cloud providers. See it all at castsoftware.com.