

SEI Bulletin

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Using ChatGPT to Analyze Your Code? Not So Fast

February 14, 2024—With about three vulnerabilities per 10,000 lines of code, there has been much speculation about how tools built on top of large language models might change the way developers write and evaluate code. A team of CERT Secure Coding researchers used ChatGPT-3.5 to examine the noncompliant software code examples in the SEI CERT C Coding Standard. In a new SEI Blog post, Mark Sherman explains that while ChatGPT-3.5 has promise, there are clear limitations.

The blog post *Using ChatGPT to Analyze Your Code? Not So Fast* gives some of the experiment's prompts and outputs, as well as how often ChatGPT-3.5 correctly identified noncompliant code or failed to. “LLM-based code analysis should not be disregarded entirely,” writes Sherman, technical director of the Cyber Security Foundations group in the SEI’s CERT Division, in the post. However, he cautions that for now, “knowledgeable users must review the output to determine if it can be trusted and used.”

[Read the post »](#)



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The award honors Nielsen's decades of "outstanding and distinguished leadership and service."

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Mark Sherman explores the efficacy of ChatGPT-3.5 in identifying errors in software code.

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