

Homework 1

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Read about ‘continuation’, what can it do? It uses ‘functional value’ to capture the history of the control flow (or the future of computation). You can ‘dig-deep’ or ‘general know’ about this subject. Write a paragraph is enough. Use any tools you want.

What is Continuation?

Continuation is a programming concept that represents the future of computation or the history of control flow in a program. It captures the program’s control state at a specific point, allowing the program to be paused and later resumed from that point. Continuations are often used in functional programming languages to implement advanced control flow mechanisms.

What Can It Do?

Continuations use functional values to capture the history of the control flow or the future of computation. They can be used to implement features such as non-local exits, backtracking, coroutines, generators, and asynchronous programming. Continuations essentially encapsulate the state of a computation, enabling the program to capture and manipulate its own control flow.

References

- [1] Wikipedia contributors. (2022, March 13). Continuation. In *Wikipedia, The Free Encyclopedia*. Retrieved 07:46, April 8, 2024, from <https://en.wikipedia.org/wiki/Continuation>
- [2] This explanation was informed by a conversation with a large language model (e.g., ChatGPT or Gemini) on April 12, 2024.