

5. Conclusions

To address students' difficulties to implement recursive algorithms in problem solving relating to programming, we developed an interactive tool that enable to run and debug recursive functions and track them visually. The tool enables tracking of user-defined, direct and indirect, linear and multi-dimensional recursive functions. We tested the tool empirically, and our findings support our assumption that a visual debugger for recursive algorithms might assist in understanding better recursion and promote higher-quality solutions with fewer errors.

In the future, we plan to expand the tool further with features related to multi-thread recursion and test it in additional academic institutes, as well as in the industry.

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