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Tuning the tuner: the art of automatic performance optimization

Willemsen, F.Q.

Citation

Willemsen, F. Q. (2026, April 14). *Tuning the tuner: the art of automatic performance optimization*. Retrieved from <https://hdl.handle.net/1887/4301430>

Version: Publisher's Version

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Note: To cite this publication please use the final published version (if applicable).

ABOUT THIS WORK

Modern science and technology runs on powerful GPUs, but achieving full performance is a complex puzzle where small adjustments to a program make enormous differences.

This work reimagines the auto-tuning process, showing how smarter, constraint-aware, and even AI-designed optimizers can unlock dramatic speedups and energy savings, resulting in computers that intelligently tune themselves.

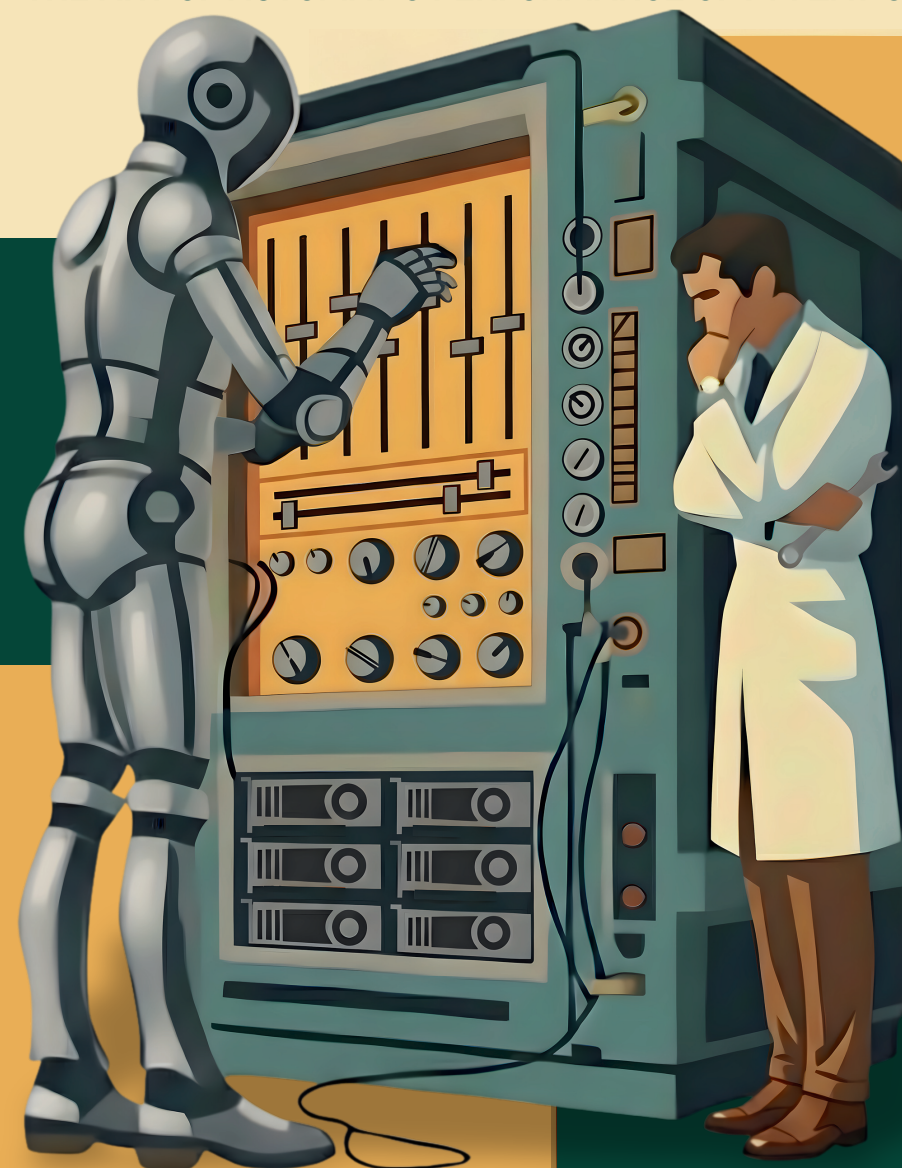


TUNING THE TUNER

FLORIS-JAN WILLEMSSEN

TUNING THE TUNER

THE ART OF AUTOMATIC PERFORMANCE OPTIMIZATION



FLORIS-JAN
WILLEMSSEN