

EzBench, a tool to help you benchmark and bisect the Graphics Stack's performance

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Summary

- 1 Introduction
- 2 Benchmarking
- 3 EzBench

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Current situation

- Complex games/benchmarks are becoming available on Linux;
- Drivers are getting more complex as performance improves;
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⇒ Need to benchmark all the platforms and games of interest.

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- Pitfalls
- Automating benchmarking

3 EzBench

Benchmarking

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- QA: Continuous Integration, performance bug reports.

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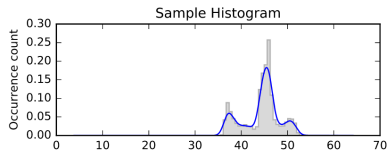
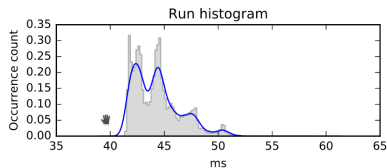
- Intra- and inter-runs variance depends on the benchmarks;
- Hitting the power budget, a thermal limit or GPU reset;
- Being able to reproduce the different test results;
- Not using the expected libraries;

Example of variances

The variance forces us to execute multiple runs, which takes time!

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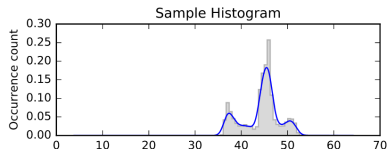
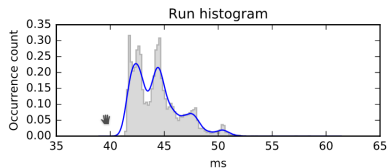
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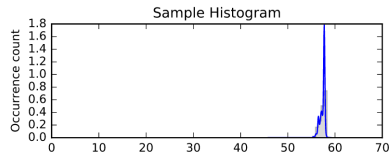
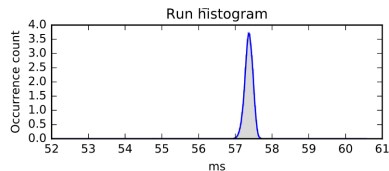
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(a) Bad FPS distribution



(b) Good FPS distribution

Figure: Examples of variance

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- Understand performance results and act upon them.

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- Requires package-kit for system libraries.

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- Overview
- Architecture and features
- Demo
- Backup slides

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Authors

- Authors: Martin Peres (Intel) & Chris Wilson (Intel);
- Licence: MIT;
- Url: <http://cgit.freedesktop.org/~mperes/ezbench/>

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EzBench - Demo time!

Demo time and questions!

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- Automatically schedule more work to improve the report.

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- Support sending emails to the authors of perf changes.