Unipycation: A Case Study in Cross-Language Tracing

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Language composition approaches have traditionally suffered from poor performance. In this talk I hypothesise that meta-tracing [2] provides a means to compose independent language interpreters while retaining the performance levels of each. To study this approach, we compose Python and Prolog interpreters to form Unipycation [1]. I'll present examples of how to use is and a suite of benchmarks that give an understanding of the trade-offs of cross language performance.[1]

References

[1] E. Barrett, C. F. Bolz, and L. Tratt. Unipycation: A case study in cross-language tracing. In *VMIL*, pages 31–40, 2013.

[2] C. F. Bolz, A. Cuni, M. Fijałkowski, and A. Rigo. Tracing the meta-level: PyPy's tracing JIT compiler. In *ICOOOLPS*, pages 18–25, 2009.

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