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Distinguished Speaker Series

Ali-Reza Adl-
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Facebook

HipHop: High- Performance PHP

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4 - 5 PM CDT

2405 Siebel Center

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Abstract

To enable fast software development, Facebook uses the PHP programming language. Although easy to learn and quick to develop with, PHP has significant performance overhead because its interpreted. This talk presents several tools that the HipHop team at Facebook has developed to improve PHP's performance. We first describe the HipHop compiler, a static compiler that translates Facebook's PHP codebase into a C++ program. The HipHop compiler has been deployed in Facebook's production environment since 2010. We then present the HipHop Virtual Machine, a new language VM that aims to bring high-performance JIT compilation to PHP.

Bio

Ali-Reza Adl-Tabatabai is a software engineer at Facebook, where he's a member of the HipHop compiler team. Prior to Facebook, Ali was a Director and Senior Principal Engineer at Intel Labs where he lead a research group developing new programming language technologies and their hardware support for future Intel Architectures. Ali holds 37 patents and has published over 40 papers in leading conferences and journals. Ali received his Ph.D in Computer Science from Carnegie Mellon University, and a Bachelor of Science in Computer Science and Engineering from the University of California, Los Angeles.



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