Project Fortress: Lessons learned implementing the best open source programming language on the JVM that nobody used.

How do you solve problems? Do you start by sketching out a solution on your whiteboard? Does it look something like this?

$$y = \sum_{k \leftarrow 1:n} a_k\, x^k$$

$$z = \texttt{MAX}\big[(j,k) \leftarrow a.indices\big]\, |a_{jk} - b_{jk}|$$

What if you could run your whiteboard, and it ran in parallel? That was the goal of Project Fortress. We came really close. In this talk I'll walk you through some of my favorite features of the Fortress programming language and the implementation challenges with targeting them to the JVM.

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