

## **The IDEAS CSE Software Developer Productivity Project**

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The IDEAS Project is a first-of-a-kind effort focused on CSE software developer productivity. It has an ambitious goal of working toward a fundamentally different approach to designing and implementing extreme-scale parallel applications and demonstrating the impact of our efforts on three important use case problems.

The IDEAS Project is developing an extreme-scale scientific software development kit (xSDK), composed of popular libraries such as hypre, PETSc, SuperLU and Trilinos that can be used in combination in a single application. The xSDK will also include reusable domain specific components such as bio-geo-chemistry APIs. IDEAS is also an incubation project for identifying and disseminating best practices in software engineering, such as development, testing, documentation methodologies and metrics. IDEAS is also committed to providing materials and resources for training.