



CODESOURCERY

Scripting Sourcery VSIPL++

HPEC Workshop

September 14-16, 2010

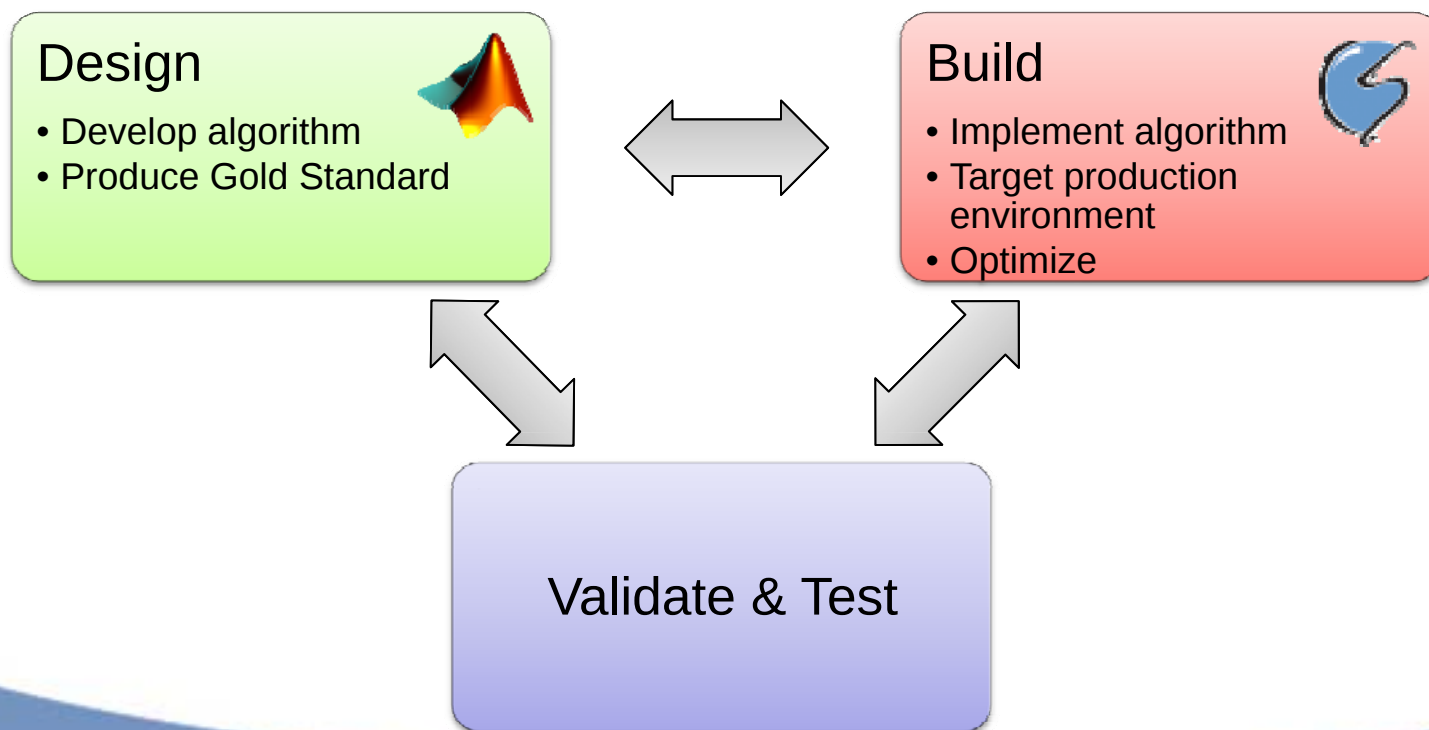
Stefan Seefeld, Brooks Moses, Don McCoy, Justin Voo
CodeSourcery, Inc.

Why scripting ?

- Sourcery VSIPL++ is designed with productivity in mind:
 - Compact and intuitive syntax
- Yet:
 - Algorithms developed in a High Productivity Environment (Matlab, Python)
 - Rewritten in C++
- How can this workflow be improved ?

Development Workflow

Algorithms are written (and tested !) twice,
using different languages, different tools,
in differing environments.



Integrated Workflow

Scripting (Matlab,
Python, etc.)

Hybrid programming

C++

- Seamless integration of prototyping and optimization
 - Code generation
 - Profiling
 - Validation
- Support data-flow in both directions
- Simpler workflow -> Higher Productivity

We would like your feedback !