### Future of Clafer

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#### GSD Lab at University of Waterloo

Jimmy Liang

Eldar Khalilov

Krzysztof Czarnecki Research. Project co-leader. Clafer language design.

Kacper Bak Research. Clafer language design. Main developer of Clafer compiler.

Michał Antkiewicz Research. Management. Requirements, design, architecture,

implementation, testing, technology transfer.

Research. Main developer of ClaferIG and Choco backend. Extensions of

the compiler, including scope computation, type system, and multi-fragment

support.

Rafael Olaechea Research. Main developer of ClaferMOO. Exact and evolutionary multi-

objective optimization algorithms.

Alexandr Murashkin

Research. Main developer of ClaferMoo Visualizer, ClaferIDE, and the

Common UI Platform. Maintainer of Clafer Configurator.

Zinovy Diskin Research. Formal semantics.

Clafer implementation in JetBrains Meta-Programming System (MPS). DSLs

on top-of Clafer.

Ed Zulkoski Research. SMT Solver integration. Multi-objective optimization.

Chris Walker Co-op. Main developer of Clafer Wiki, HTML and GraphViz generators.

Neil Vincent Redman

Co-op. Main developer of ClaferConfigurator, extensions to ClaferMoo

Visualizer.

Luke Michael Brown Co-op. Extensions of Clafer compiler and instance generator.

#### MODELS group at IT University of Copenhagen

Andrzej Wąsowski Research. Project co-leader. Clafer language design.

Paulius Juodisius Research. Main developer of Behavioral Clafer.

Raghava Rao Mukkamala Research. Formal semantics and testing of Behavioral Clafer.

### Third-Party Contributors

Markus Voelter Clafer implementation in JetBrains Meta-Programming System (MPS). DSLs on top-of Clafer.

### Clafer Today

- Structure & Constraints
  - "Todayish": behavior
- Variability
- Underspecification
- Automated Analysis
  - Constraint Checking
  - Instantiation
  - Multi-Objective Optimization

# http://clafer.org

Exmples->Clafer Model Wiki

## "Clafer as a basis for DSLs"

**Future** 

# Clafer in Meta-Programming System (MPS)

**DEMO** 

(very early prototype)

# Thank You

http://clafer.org