# Crowd-Sourced Annotations (Transition to Practice) annotationsforall.org

Software that is

more robust, safe,

secure, correct



### **Challenge:**

Broaden the use of behavioral specifications to aid software verification using static formal methods.

Communityshared library specifications

Community

contributions

Tools supporting checking formally-specified requirements

#### **Solution:**

- Improved library annotations (in ACSL and JML)
- Improved tools (Frama-C for C and OpenJML for Java)
- Improved documentation
- Collaborative user communities

ACI-1314674 GrammaTech, Inc.
David R. Cok 585-362-2740

dcok@grammatech.com

## libraries for ch

 Improved tools and libraries for checking software during development

**Scientific Impact:** 

 Scaling the logical foundations of automated SW checking

#### **Broader Impact:**

- Society: Safer, more correct, more secure software
- Education: Student projects, Masters and PhD theses, REU participants
- Transitioning:
   partnerships in process
   with industrial software
   verification projects