

# ACS-15 Goal Reasoning Workshop: Tentative Agenda

28 May 2015 | Atlanta, GA

Chair: David W. Aha (Naval Research Laboratory)  
david.aha@nrl.navy.mil

## Introduction

0900-0910: Workshop Focus, Goals, & Overview (**David W. Aha**, NRL)

## 1. Applications

0915-0930: *Reasoning about Attack Goals for Cyber Resilience*

**Ugur Kuter**, Mark Burstein, and Robert P. Goldman (SIFT)

0935-0950: *Goal Reasoning for an Autonomous Squad Member*

Kellen Gillespie, Matt Molineaux, Michael Floyd (Knexus Research), Swaroop Vattam (NRC), & David Aha (NRL)

## 2. Formal Models

0955-1010: *Toward a Formal Model of Planning, Action, and Interpretation with Goal Reasoning*

**Michael T. Cox** (Wright State University)

1015-1030: **Discussion**: *Formal Models of Goal Reasoning*

**Mark (Mak) Roberts** (NRC & NRL)

1030-1100: **Break**

## 3. Meta-Reasoning

1100-1115: *Towards Cognition-Level Goal Reasoning for Playing Real-Time Strategy Games*

Hector Munoz-Avila, **Dustin Dannenhauer** (Lehigh U.), and Michael T. Cox (Wright State U.)

1120-1135: *Meta-Reasoning Over Goals: A Summary of the GAIA Project*

**Spencer Rugaber**, Ashok Goel (Georgia Tech.), and Lee Martie (UC Irvine)

## 4. Narrative Intelligence

1140-1155: *Goal Reasoning and Narrative Cognition*

**Tory Anderson** (Georgia Tech.)

1200-1215: *Character-Oriented Narrative Goal Reasoning in Autonomous Actors*

**Alexei Samsonovich** (GMU) and David W. Aha (NRL)

1220-1330: **Lunch**

## 5. Goalless Reasoning and Poster Session

1330-1355: **Invited Talk**: *Reasoning and Making Sense of Data in the Absence of Goals*

**Mary Lou Maher** (UNC Charlotte), Kathryn Merrick, and Bing Wang (U. New South Wales)

1400-1445: **Poster Session**

- *PlanBot: A Replanning Agent for Starcraft*  
**Michael Leece** and Arnav Jhala (UC Santa Cruz)
- *Interactive Knowledge-Goal Reasoning*  
Benjamin Bengfort (U. Maryland) and **Michael T. Cox** (Wright State U.)
- *Knowledge Representation for Dynamic Formation of Sensing Goals in Cyber Defense*  
Robert P. Goldman, **Mark Burstein**, Ugur Kuter (SIFT), Paul Robertson, and Dan Cerys (DOLL Labs)
- *Cleaning Efficiently: A Case Study in Modeling Goal Reasoning and Learning*  
**Mark (Mak) Roberts** (NRC/NRL) and David W. Aha (NRL)

1445-1515: **Break**

## 6. Emotion and Personality

1515-1540: **Invited Talk**: *Goals, Personality, and Conversational Style*

**Pat Langley** (U. Auckland)

1545-1600: *Believable Emotion-Influenced Perception: The Path to Motivated Rebel Agents*

Alexandra Coman (Ohio Northern U.), Kellen Gillespie (Knexus Research), and Hector Munoz-Avila (Lehigh U.)

## 7. Motivated Systems

1605-1620: *Guiding the Ass with Goal Motivation Weights*

Hector Munoz-Avila (Lehigh U.), **Mark Wilson**, and David W. Aha (NRL)

1625-1645: **Discussion**: *Types of Goals and Goal Reasoning*

**TBD** (?)

## Wrapup

1650-1700: Workshop Wrapup & Future Plans (**David W. Aha**, NRL)