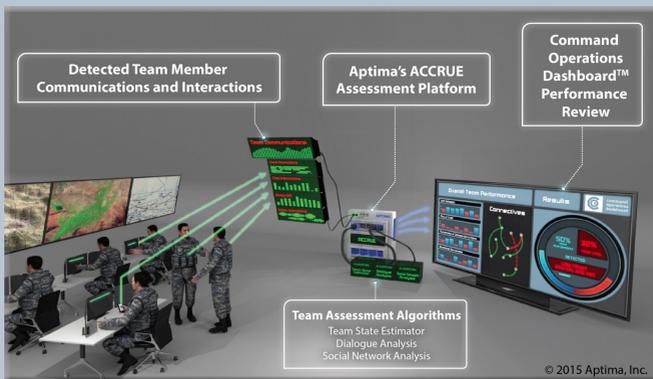


Two Aptima Capabilities Relevant to MOSAIC

1. Organizational Performance and Assessment

- Provides innovative approaches to measuring the state of teams and organizations through a combination of multimodal sensors, advanced algorithms, and team theory
- The Command Operations dashboard (COD; see images on the right) provides real-time visualizations of the organization to reveal objective assessments of team performance and states for the purpose of feedback and team interventions
- Currently being tested within Army Staff training programs



One system developed by the OPA capability called ACCRUE

2. Human System Performance Assessment

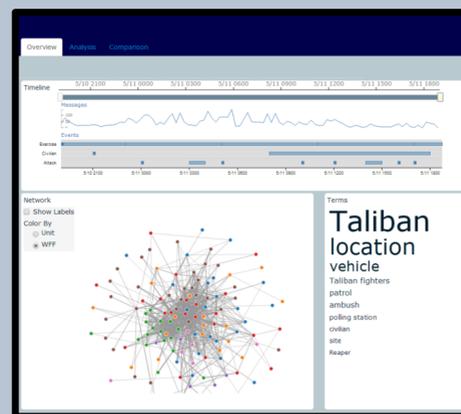
- Enables evaluators and intelligent systems to sense human operators at work, assess the interaction between humans and technology, and augment these interactions through advanced interaction design approaches
- Offers system and technology evaluation expertise, data analytic approaches for real world challenges, and flexible and rapidly deployable infrastructure for real-world and laboratory settings
- Research is funded by the Air Force Research Lab and by AHRQ for use in hospital settings for medical training exercises



A framework for work completed under the HSPA capability

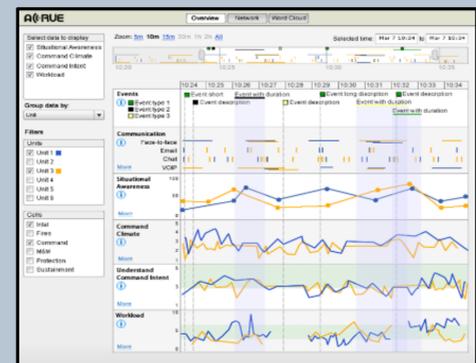
Future Research Possibilities

- Obtain a more complete understanding of individuals and teams
- Integrating physiological, psychological, behavioral, sociological, and system signals
- Utilize unobtrusive metrics
- Provide real time analyses for enhancing team effectiveness
- Test and/or create new sensors for continued advancement in the technology behind the research



A snapshot of the COD real-time visualization component

Example objective metrics to be integrated with the COD



Collaboration Opportunities

Aptima is interested in working with companies

- With unobtrusive metrics developed or that can be developed for the purpose of investigating team interactions
- That can complement Aptima's expertise in individual and team dynamic systems through innovative analytics

Who is Aptima?

- Small business with a concentration on DoD and IC research and development
- The Premiere "Human Centered Engineering" Company
 - Analyze and design complex sociotechnical systems
 - Combine social science theory with quantitative, computational methods
- Experience with IARPA, DARPA, and the military service labs

Contact Information

Shawn Weil, Ph.D.
Executive Vice President
& Principal Cognitive
Scientist
781.496.2456
sweil@aptima.com

Kara Orvis, Ph.D.
Division Director
Performance Assessment
& Augmentation
703.629.1823
korvis@aptima.com

Samantha Perry, Ph.D.
Scientist
Performance Assessment
& Augmentation
937.490.8006
sperry@aptima.com