



AREA Research Committee

The research committee's purpose is to lead an advocacy research program to continually advance AR technologies to the benefit of the AREA members and the wider AR ecosystem.

Committee Charter



• Encourage, promote and co-ordinate research on topics of interest to and based on proposals from AREA members

• Ensure the most appropriate research proposals advance.

Manage AREA processes to ensure the best results are gained

 Disseminate the results of research, ensuring the needs of the members are met while continuing to benefit the wider AR ecosystem



Two Types of Research Projects

AREA-Directed

 Benefit of AREA members (and, in the measure possible, the community at large)

Member-Directed

 Benefit solely for Sponsor Members who choose to fund or cofund a research project



Member-directed Projects

- AREA members determine topic(s) and contribute fee to be invested in the project
- AREA serves as research manager
 - Call for proposals
 - Coordinates and reviews responses
 - Contract is between research supplier and the AREA
- All IP belongs to members



AREA-directed Projects (1 of 2)

- All Sponsor, Contributor & Non-commercial/academic members may participate in idea submission
- All the above classes of membership vote to choose the project topic
- AREA member provides one research manager
 - Generates materials to be used in Call for Proposals
 - Coordinates and reviews CfP responses
 - Contract is between research supplier and the AREA
- Members can be research suppliers



AREA-directed Projects (2 of 2)

- Paid by the AREA Research Committee allocated budget: US\$15,000/project
- All results shared with all above classes of membership (members in good standing)
- AREA owns all IP

AREA

Project idea submissions

- Any member
- Standardized form
- Identifies research group to perform work
- Includes a manager

AREA issues RFP

 To research groups identified in proposal (and others)

Project awarded

May be negotiations

June 21 July 11 July 20 Aug 14 Aug 21

Topic chosen

 Voting, committee meeting and e-mail approval by BoD

Deadline for proposals

- Evaluation
- Request additional input

1st AREA-Directed **Project**

- Wearable Enterprise
 Augmented Reality Security
 Risks
 - Classification Report A
 - Framework
 - Testing protocol (Report B)
- January to June 2017

2nd AREA-Directed **Project**

- Measuring AR
 Return on Investment
 (ROI)
- Deliverables
 - Report
 - Calculator
 - Case Study
- August to December 2017

3rd AREA-Directed **Project**

 Framework for assessing Human Factors and certifying/managing AR safety in the workplace

Deliverables

- Research report
- Recommended steps for customization of safety policies
- Case Study
- February to August 2018

4th AREA-directed Research Project

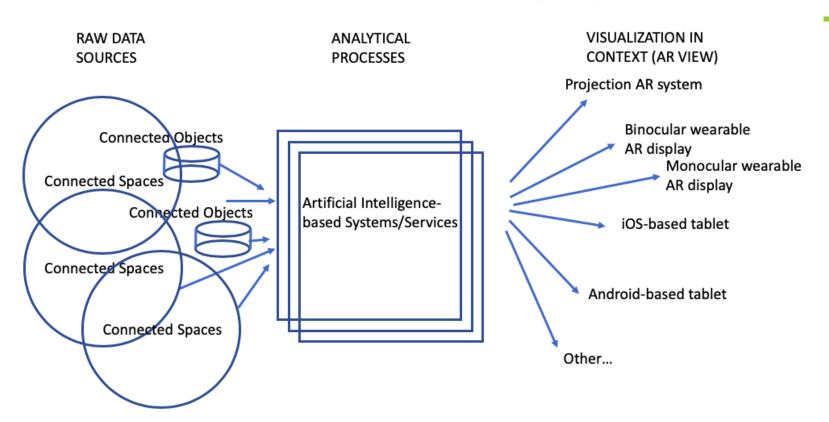
- Identification of and Strategies for Overcoming Barriers to AR Adoption in Manufacturing Environments
- Deliverables
 - Comprehensive report
 - Framework tool (using Excel)
 - Case study
- October 2018 to February 2019

5th Research **Project Topic**

Best Practices
when Merging IoT,
Al and AR in the
Workplace



Merging IoT, AI and AR





Merging IoT, AI and AR

- Connected workplaces produce copious real time data
- Few people are qualified to discuss state of the art in all three of these fields (what is the state of the art?)
- Not all "raw" data is appropriate for AR viewing
- Not all users should get real time data
- What are the best practices/recommendations to (begin to) sort this out?

AREA Research Webinars

Invite academic researchers to share their current research projects with AREA members



Webinar Series

- Purpose: expose AREA members to research happening in academic and corporate R&D centers
- Target audiences: AREA members
- Speakers: faculty and researchers from around the world
- Logistics
 - Scheduling
 - Rehearsals

New/Future Directions for AR Research

A research agenda is a framework for prioritizing obstacles that AREA members need addressed

Develop Research Recommendations Attributable to AREA Research Committee

- Most urgent enterprise AR obstacles to be addressed in
 - Technology
 - Business
 - User experience/human factors
 - Interoperability/standards
- Outreach/influence current and future research projects
 - Issue report quarterly or semi-annual
 - Promote directly to universities, government agencies
 - Post on AREA blog

