AWARE-AI NSF Research Traineeship Program

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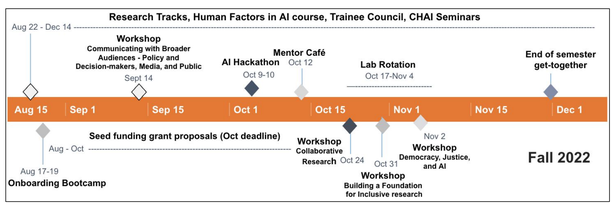
Intellectual Theme

AWARE-AI Trainees experience convergent AI research guided by accomplished faculty in research tracks and carefully curated career-enhancing activities that directly address skill gaps in graduate AI curricula, and develop their network in a research community. Trainee learning objectives include **cross-disciplinary breadth**, **depth in science and technology skills**, **depth in advanced research practices**, and **holistic D&I competency**

Fall 2022 schedule of trainee activities

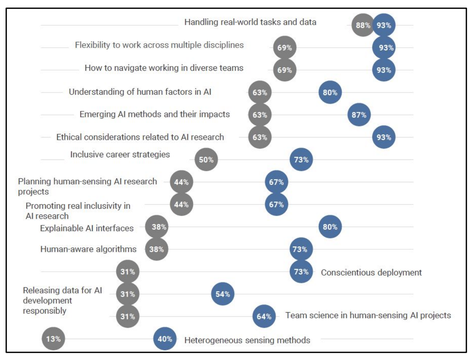


Select Findings - Initial Evaluation

Why do trainees participate? To:

- be part of an interdisciplinary cohort
- increase confidence in their ability to build a successful career
- gain expertise in areas outside of their discipline
- participate in multidisciplinary research
- increase confidence in their ability to navigate the job market
- access an internship in industry
- build their communication skills
- explore careers outside of academia
- gain conference experience
- participate in inclusive networking

Pilot trainees' pre/post skills gains



Additional areas with significant pre-post change and large effect size: **career and professional development**, **communication**, and **scientific identity**

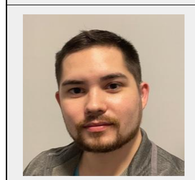
AI Research Tracks - Funded Trainees

Software
Arianna Giguere
Imaging Science PhD

Multimodal modeling of driving behavior in the presence of distraction from task-based dialogue

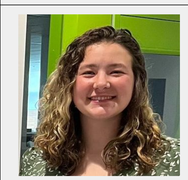
Hardware
Justin Namba
Computing & Info Sciences PhD

Continual learning for comfort index estimation in human-robot collaboration in industrial settings



HCI
Matthew Seita
Computing & Info Sciences PhD

Interface design of AI-driven speech recognition systems for older adults with hearing loss

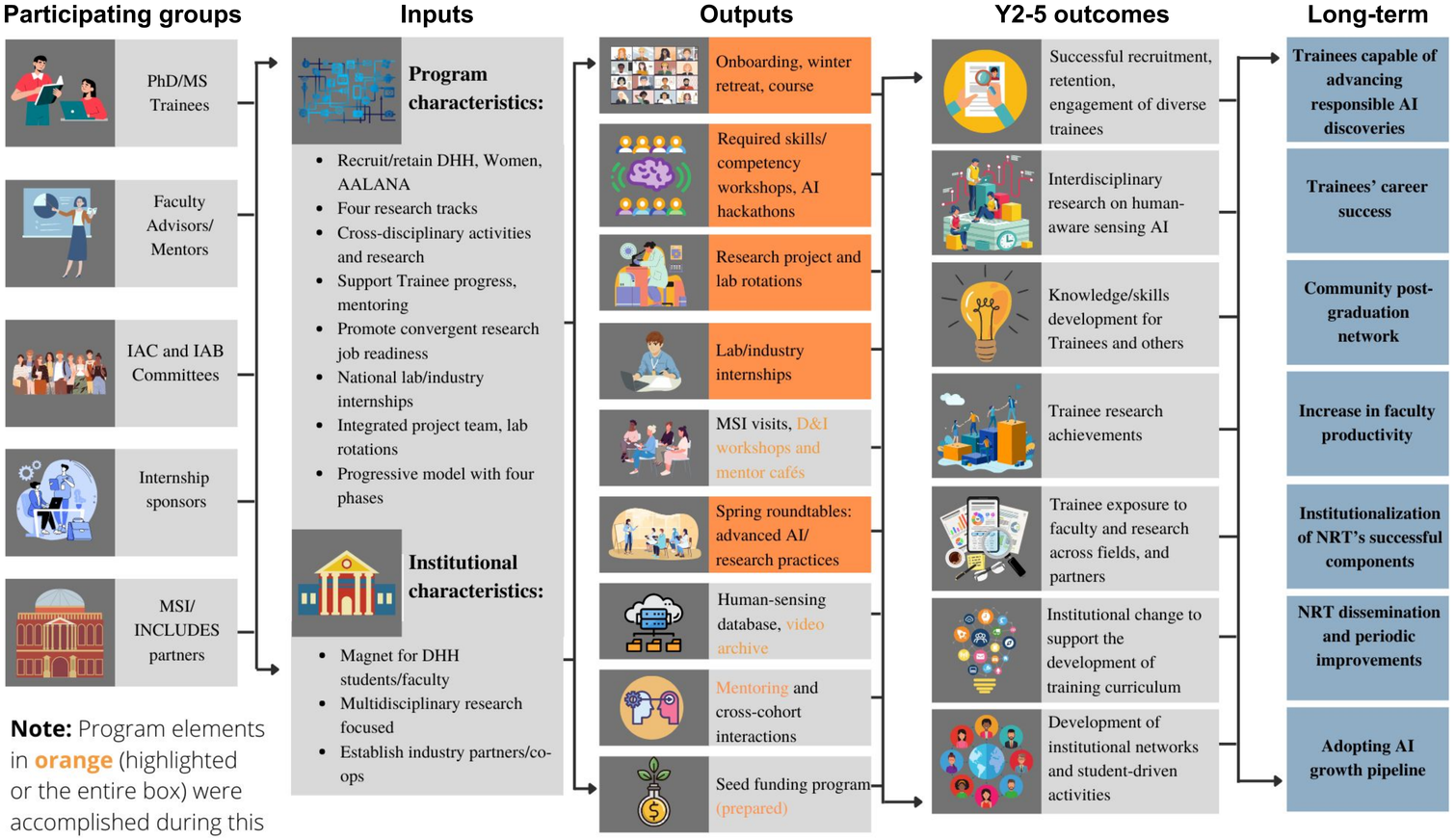


Cog. Models
Margaret Gray
Data Science MS

Differences in hearing and deaf and hard of hearing individuals when interacting with collaborative robots

The AWARE-AI NRT has engaged 26 students and 14 faculty to date

Key Elements and the AWARE-AI NRT Logic Model



Note: Program elements in **orange** (highlighted or the entire box) were accomplished during this reporting period (Year 1).

Results, Products, and Next Steps

- Pilot cohort success: 100% would recommend the NRT to peers, and 100% rated the NRT as 4 or 5 (of 5) on inclusivity
- AI@RIT Summit: PI keynote, ~10 res. track posters, affiliate tutorial/panel
- Products: video archive, communication and recruitment portfolio, PhD diversification initiative, newsletter, research plan, selection and offers documentation, designated trainee group in university student system, seed funding mechanism, research publications, materials for training elements
- Launched: inaugural 4-member Trainee Council and AWARE-AI Supporters
- Lab rotation evaluations: overall positive, with a wish for more time
- Pilot trainee defended dissertation and is graduating with PhD in ECE
- NSF grant proposals: multiple submitted with trainee and faculty involvement, or to enable international experiences after trainee fellow year
- In-progress: expanding internship partnership program, and MSI visits
- What's next: database, AI pledge, nurture student-driven and DEI leadership, engage in recruitment and selection with focus on target groups

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