## Scientist of the Month: Starring Ayanna Howard

### Ayanna Howard

- Dr. Howard is Chair of the School of Interactive Computing in the College of Computing at GA Tech.
- Director of the Human-Automation Systems Lab (HumAnS)
- 2021 Elected Fellow in AAAI
- Research discipline is robotics and human-robot interaction



Photo from: https://news.osu.edu/ayanna-howard-named-next-dean-of-colleg e-of-engineering/

# Major research area: Using robots to assist with therapy

## Musical Robots for Children with ASD using a Client- Server Architecture

- Designed musical robots that can encourage social and emotional interactions of children with ASD (Autism Spectrum Disorder)
- Robots are able to detect the emotional and physical state of children and make musical sounds (and other non-speech sounds) based on their interactions

#### Using robotics for preventive measures

#### The Infant Smart Anklet for Infants At-Risk of Developing Cerebral Palsy

- Infant kicking patterns can help detect developmental delays such as cerebral palsy.
- Developed the Infant Smart Anklet
  - Anklet collects live data of the infant's kicking movement, which
    is sent to an app. If the data meets a specific threshold, a trigger
    is activated

# Interested in learning more about Ayanna Howard? Check out some of her interviews!

Interview with Lex Fridman:

https://www.youtube.com/watch?v=J21-7AsUcgM&t=29s

Talk at Grace Hopper Conference:

https://www.youtube.com/watch?v=Z6mmXbOnX5Q