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# **Environmental Context from Machine Readable** Visual Markers

#### A device that uses machine readable visual markets to provide input of environmental context into a device for assistive communication

Georgia Tech researchers have developed a communication system based on machine-readable visual markers. This technology can be utilized in augmentative and alternative communication devices for individuals with impairments of written and/or verbal communication. The system can overcome the limitations of GPS based systems, providing high resolution indoor location context as well as contextual awareness of entities and artifacts present in the environment. The purpose of this invention is to provide a method for an Augmentative and Alternative Communication computing device (AAC device) to sense artifacts and entities in proximity to the device as well as the devices current location.

#### **Summary Bullets**

• **High resolution** — system can provide high resolution indoor location context

#### Solution Advantages

• **High resolution** — system can provide high resolution indoor location context

#### **Potential Commercial Applications**

- Augmentative and Alternative Communication software systems
- Communication application related to sensed context

#### **Background and More Information**

Assistive devices for communication exist to help people who have impairments in expressive or receptive communication. However, convention assistive devices fail to provide an efficient means of translating environmental factors into relevant communications options.

#### **Inventors**

- Dr. Melody Jackson
   Associate Professor Georgia Tech School of Interactive Computing
- Jeremy Johnson
   Senior Research Scientist Georgia Tech Interactive Media Technology Center
- Dr. Carrie Bruce Senior Research Scientist — Georgia Tech Center for Assistive Technology and Environmental Access

#### **IP Status**

: US8517253B2

#### **Publications**

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### **Images**

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