

Environmental Context from Machine Readable Visual Markers (#5429)

A device that uses machine readable visual markers 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 device's current location.

Benefits/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/Context for This Invention

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

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Patent/IP Information

U.S. Patent Issued

[US8517253B2](#)

<https://patents.google.com/patent/US8517253B2/en?q=8%2C517%2C253>

Publications

For more information about this technology, please visit:

<https://licensing.research.gatech.edu/technology/environmental-context-machine-readable-visual-markers>