



[View U.S. Patent Application Publication No. US-2023-0376766 in PDF format.](#)

**WARF: P220141US01**

Inventors: Mohit Gupta, Matthew Dutson

## The Invention

UW-Madison researchers have created an event neural network system and associated methods, comprising a family of neural networks in which neurons transmit (thereby triggering downstream computation) only when there is a significant change in their activation. Neurons fire only when they have something “interesting” to say, leading to increased efficiency and accuracy.

## Applications

Ideal for applications that require processing video data at high speeds with minimal power budget including:

- Robotic navigation
- Surveillance
- Autonomous vehicles
- Drones
- IoT/edge devices

## Key Benefits

- Improved efficiency for video analysis.
- High accuracy inference.
- Reduced computation costs.

## Additional Information

### For More Information About the Inventors

- [Mohit Gupta](#)

### Tech Fields

- [Information Technology : Computing methods, software & machine learning](#)
- [Information Technology : Image processing](#)

For current licensing status, please contact Michael Carey at [mcarey@warf.org](mailto:mcarey@warf.org) or 608-960-9867