

Na Gong, PhD.

Professor of Electrical and Computer Engineering
Director, Institute for Artificial Intelligence and Microelectronics (IAM)

105 Research Articles

\$10M+ in Research Funding

Research Interests

Artificial Intelligence (AI) System
Memory Technology

Hardware Design for Privacy
AI Accelerators

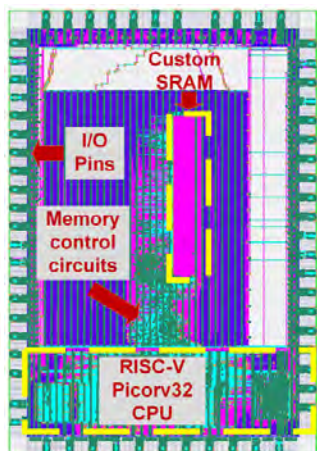
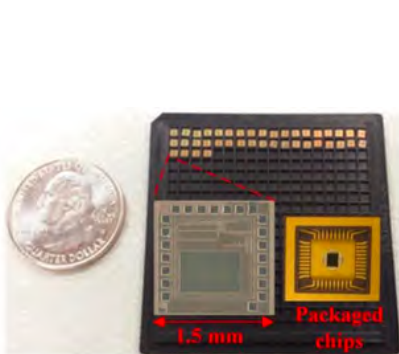
Intelligent Computing
Circuits and Systems

Technological Capabilities

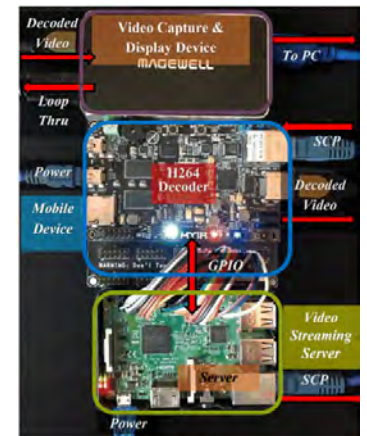
Application-Specific
Integrated Circuit (ASIC)

Embedded Systems
and FPGA

AI Solutions for
Versatile Applications



Application-specific Integrated Circuit (ASIC)
developed by Dr. Gong's team



AI-enabled smart video system
developed by Dr. Gong's team (based
on FPGA and embedded system)

2017
IEEE Transactions on Circuits and Systems II
"Data-Driven Intelligent Efficient Synaptic Storage for Deep Learning"

2021
IEEE Transactions on Sustainable Computing
"Application-Aware Quality-Energy Optimization"

2024
Nature Scientific Reports
"Fluorescence Excitation-Scanning Hyperspectral Imaging with Scalable 2D-3D Deep Learning Framework for Colorectal Cancer Detection"

2019
IEEE Transactions on Big Data
"Data-Pattern Enabled Self-Recovery Low-Power Storage System for Big Video Data"

2020
IEEE Transactions on Very Large Scale Integration (VLSI) Systems
"Memory Optimization for Energy-Efficient Differentially Private Deep Learning"

2023
"Local Differential Privacy Using Static Random-Access Memory"
Patent Filed



UNIVERSITY OF SOUTH ALABAMA
COMMERCIALIZATION AND
INDUSTRY COLLABORATION

251.460.7932
techtransfer@southalabama.edu
775 University Blvd, Building 2 Suite 150; Mobile, AL 36608
<https://www.southalabama.edu/departments/research/ocic/>