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Development of Capacitive Fluidic Sensors with 3D Printed Channels and Direct-Ink-Written

Camera based collision avoidance methods for unmanned aerial vehicles, simulator environment

Application of deep learning methods for improvement of self-organizing maps in multidimensional

Self-motion and orientation estimation for aircraft

Laboratory Automation in Systems Biology

Laboratory Automation in Systems Biology

Development of an open source colony-picking robot

Development of An Open-source Microscope Stage

Motion Blur Removal Using SfM Geometry

Surface Reconstruction from 3D models after Gaussian Splatting

Affine Transformations for SfM/SLAM

GPU exploitation for real-time 3D reconstruction and mapping

RTAB-Map-Based Real-Time 3D Mapping on a Drone Using Jetson NX

Packaging SAMannot as a Python Package and Improving Its Usability

Quantization and Memory Optimization of 3D SLAM and Reconstruction Transformer Models

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Detection, Tracking, and Localization of 3D Environmental Changes from RGB(D) Video

Quantitative and AI-Based Analysis of Surgical Motion Using Optical Motion Capture

Spatiotemporal features of human single neuron waveforms revealed by intraoperative high-resolution

From Full-Body Instrumentation to Minimal Wearables: Multimodal Knowledge Distillation for

Performance and Convergence Analysis of Sparse Linear Solvers on Parallel Architectures

Adapting Neural Networks to Evolving Labels in Real-World Applications

Movement and Gesture Analysis for Psychiatric Illnesses

Dynamic properties of generative networks

Development Oscillator based neural networks

Investigation of adversarial samples in machine learning

Evaluating World-Model Consistency in Large Language Models Through Rule-Based Generation

Self-motion and orientation estimation for aircraft

Camera based collision avoidance methods for unmanned aerial vehicles

Cave mapping with drones

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Face recognition and tracking on UAV swarm

Testing the functions of neural microsystems
Implementing deep learning neural networks on FPGAs
Accelerating fluid dynamics computations on FPGA
Acceleration of compute intensive applications on FPGA
Development of 10Gb Ethernet interface and TCP/IP packet processing circuit for FPGA
Development of an embedded image processor architecture on FPGAs
Complex dynamics and basic computations in cortical networks
Using agentic artificial intelligence to accelerate research in computational neuroscience
Classification of cortical neurons based on experimental data
Real-Time EEG–Motion Coregistration: Technical Implementation and Application to Move
Modelling the interactions between Na⁺ and Ca²⁺ spikes in CA1 pyramidal neurons
Geometry of drift in hippocampal spatial codes
Plasticity of hippocampal spatial representation during navigation in virtual reality
Agent-based modelling of epidemics
AI-Driven Optimizations for High-Performance Stencil Codes
Experimental investigation of cell-cell interactions in yeast colonies
Development of high-throughput methods to study Yeast co-cultures
Investigating yeasts in microfluidic chambers
Analysis of Microscopic Images of Yeast Colonies
What's going on in the microbiome: Understanding gene-regulation dynamics with AI
Gene prediction revisited
Rotating plate design and programming for metamaterial characterization
Functional metasurfaces for sensing / Metamaterial Resonator Based Microwave Sensing
Electromagnetic software development for metamaterial research on high performance com
3D printed metamaterial design
Investigation of Silver nanoparticle containing wound dressing hydrogels for Ag release and
Compression simulation software development for pharmaceutical use
Human and Pig Native Excised Skin Preparations for In Vitro Penetration and Permeation
Development and validation of eye-on-a-chip microfluidic systems to study ophthalmological
Development of novel gene-therapy methods in experimental animal models
Pioneering Early Disease Diagnosis with Deep Learning in the Human Brain
Measurement and modification of individual behaviour using embedded systems
Rewiring the Brain: How Artificial Activation Reshapes Gene Expression
Portfolio Optimization with Artificial Intelligence

Pricing Financial Options with Artificial Intelligence