研究室	修士論文タイトル
藤村	Improved Wolf Pack Algorithm for Solving Vehicle Routing Problem with Time Window in Cold Chain Logistics Distribution
藤村	Traffic Signal Control based on Deep Reinforcement Learning
藤村	Image Generation for Fashion Image Editing with GAN
藤村	Field Fire Smoke Detection Algorithm Based on Video Characteristic and Convolutional Neural Networks
藤村	Drowsiness Detection Based on Facial Behavior Analysis
藤村	Steel Surface Defect Detection with a Region-based Convolutional Network
藤村	Clothing Retrieval based on Clothing Label and Vision Feature
藤村	Spatiotemporal Sequence Forecasting of Typhoon Images
藤村	Customers' behavior classification of using the coupons in Online-to-offline retailing
藤村	Research on Hand Gesture Recognization based on Depth Camera
古月	SVM Based One-class Anomaly Detection with a Quasi-linear Kernel in Realistic Settings
古月	Single-View 3D-Object Reconstruction with Projection Loss
古月	SAN: Sampling Adversarial Networks for Zero-Shot Learning
古月	Video Object Detection with Squeezed GRU and Information Entropy Attention
古月	An Aspect-Based Co-Attention Model for Recommendation Task
古月	Denoised-FPN: Robustness of Object Detector against Unseen Noise through Adversarial Training
古月	Classification of Music into Human Emotional Moods Using Graph Based Semi-supervised Learning
古月	Relation Classification with Multi-level Features
古月	Survival Analysis of Brain Metastases Using Deep Learning Method
岩井原	Contribution of Improved Character Embedding and Latent Posting Styles to Authorship Attribution of Short Texts
岩井原	Weakly Supervised Long Document Classification by Utilizing a Mixed Neural Summarization Model
岩井原	Predicting Articles to be Edited Based on Temporal Graph Embedding
岩井原	Translating Embeddings for Knowledge Graph Completion Utilizing Type Correlations
岩井原	Click Count Prediction Utilizing Link Graph Embedding
岩井原	Utilizing BERT Pretrained Models with Various Fine-tuning Methods for Subjectivity Detection.
鎌田	Data Augmentation for Ancient Characters via Semi-MixFontGAN
鎌田	Stain-Refinement and Boundary-Enhancement Weight Maps for Multi-organ Nuclei Segmentation
鎌田	Variation Guiding Feature Attention for Metric Learning
鎌田	Coarse to Fine Approach for Multi-Organ Segmentation in Head and Neck CT Images
鎌田	Combined CNN-based Denoising for Highly-Compressed Images and Videos
鎌田	Diabetic Retinopathy Grading based on Lesion Correlation Graph
小柳	Optimizing the Cache Replacement Policy of Redis
小柳	Study on Traffic Controlling in SDN for Data Center

小柳	Research on Density-Based Spatial Clustering Algorithm with Fast Approximate Nearest Neighbor Query Technology
小柳	Fine-Grained Recovery Mechanism on Apache Flink
小柳	Research on Secure data sharing in IoT based on Blockchain
ルパージュ	Analogical potential: learning from the differences between differences
松丸	ロボットアーム操作のためのYOLO V3と改良されたLRCNモデルの組み合わせによる手の動的ジェスチャーの認識.
田中（二）	Real-World AR Pet: An Emotional Supporter and Home Guide
田中（二）	Using Multiple Kinds of Markers and Hand Gesture to Enhance User Interactions in Marker-Based AR System
田中（二）	A Mixed Reality Shopping System Providing Hand Scale Preview and Gesture Interaction
田中（二）	Interactive Personalized Human Avatar and Its Application to Work Incentive Systems
田中（二）	Food-tracker: A food recording system based on real-time food recognition and meal intake detection
田中（二）	MagicABC: A Parent-Child Tool to Modify Preschoolers' Pronunciation With Augmented Reality
坪川	Study on a submicron-scale broadband polarization splitter
坪川	Study on a refractive index sensor using slot-waveguide ring resonators
坪川	Cost analysis for the migration/upgrade of the Senegalese GPON netowrk toward NGOA networks
吉江	Real-time Lane Detection Based on Encoder-Decoder Convolutional Neural Network
吉江	DualBox: Generating BBox Pair with Strong Correspondence via Occlusion Pattern Clustering and Proposal Refinement
吉江	Attention Mechanism for Neural Dependency Parsing
吉江	An Approach to Weighted and Verifiable Secret Sharing Scheme for Storage System with Simple Access Structure and Varying Storage Space
吉江	Alternative Adversarial Sampling Attack on Text and Sentiment Classification
吉江	Analysis on the Usage of Topic Model with Background Knowledge inside Discussion Activity in Industrial Engineering Context

生産システム分野

研究室	修士論文タイトル
犬石	Study on process and device structure design of a p type SOI LIGBT for improving performance and forward blocking voltage
犬石	Process and device structure design for an emitter common complementary LIGBT inverter on bulk Si
犬石	Study on process and device structure design of a p type SOI LDMOS for performance improvement
犬石	Study on a simple resurf structure design of an n type LDMOS on bulk Si using a p-top and an n-top layer
犬石	Comparative study on structure design between SiC and Si power devices
犬石	Study on the frontside and backside structure and the layout design of a RC-IGBT with Schottky diodes
犬石	Study on buffer design and local lifetime control for a RC-IGBT with hydrogen implantation
犬島	Driver Drowsiness Detection using Neural Network
犬島	Motion Prediction of Traffic Vehicle based on HMM
犬島	Optimal Engine Emission Control in Different Speed Operating Environment
犬島	Road Area Detection Based On Machine Learning Method
犬島	Lidar Enhanced Visual SLAM
犬島	Pedestrian Trajectory Prediction Based on Deep Learning Method
犬島	Local Mapping and Localization Method Based on Tightly Coupled 3D Lidar and IMU
犬島	Major Road Mark Detection In Intelligent Vehicle Control System
犬島	Traffic Sign Recognition System Based on Improved DSSD Network
犬島	機械学習による橋梁劣化診断
李	An Improved Path Planning Algorithm with Path Smoothing in Partially Known Environment
李	PSO-PIDNN Control of Quadrotor with Path Tracking
李	Parking Space Detection and Dynamic Map Path Planning for Multiple Vehicles
李	Drowsy Driving Detection by Multi-Source Data Fusion Using Long Short-Term Memory
李	A New Cube-RRT Algorithm for Path Planning of Quadrotor
李	Particle Swarm Optimization
三宅	Intracellular cargo delivery through electrochemical metal-organic hybrid nanogate
三宅	Electrochemical control of proton flow at a biotransducer / lipid bilayer interface
三宅	A bioabsorbable wireless battery for smart contact lens
三宅	Enzyme-coated carbon nanotube fibers and their application for wearable power sources
村田	Inventory Scheduling for Loss Control of Perishable Food with Uncertain Demand
村田	Genetic Algorithm for Robust Multi Objective Scheduling and Order Scheduling with Uncertain Daily Production Quantity
村田	Multi-objective Demand Responding Micro Grid Operation with Uncertain Renewable Energy and Load Demand
村田	Facility configuration planning in closed-loop supply chain under fuzziness of demand and production capacity
大貝	A Strong Robust Lane Detection System based on LaneNet for Autonomous Driving
大貝	Pedestrian Detection And Trajectory Prediction based on Modified LSTM

大貝	An Automatic Motion Planning Algorithm Based on Improved RRT
大貝	Overtaking with Improved Q-learning based on Autoware.
大貝	Driver Fatigue Detection System Based on Blinking and Yawning
大貝	Object Detection by Feature Pyramid Networks in narrow street
清水	Deblurring of NIR transillumination images by deep learning
清水	Experimental verification of scattering estimation from backscattered light for noninvasive evaluation of blood turbidity
清水	Depth estimation of blood vessels in 2D NIR transillumination images using machine learning
清水	Development of real-time system for NIR functional transillumination imaging
清水	Simulation of light propagation in human body for noninvasive measurement of blood turbidity
清水	Attempt for trans-illumination imaging along irregular-shape surface
清水	Noninvasive optical measurement of blood turbidity in capillary
田中（英）	Development of Smart Shoes for Safe and Healthy Walking
田中（英）	Easy Setup Multifunctional Gear Detection System with a Laser Sensor
田中（英）	Development of a Wearable Chair with Foldable Mechanism
田中（英）	Study of Current Emotion and Muscle Fatigue Evaluation Method for a Walking Assistive Device
田中（英）	Development of the Motion-Prediction System Based on Logistic Regression for an Upper-Limb Assistive Device
立野	Indoor Localization Method Based on Integration of RSSI and Inertial Sensor
立野	Improvement of Multi-lateration Methods Using RSSI for Outdoor Positioning System
立野	Development of Human Activity Detection Using Low Resolution Infrared Array Sensor
立野	Drowsiness Detection System Based on Heart Rate Variability Analysis Using Convolutional Neural Network
立野	Development of User-Independent Sign Language Motion Recognition System Based on Electromyography Signal
巽	Study on the reliability of interconnections formed by nickel micro-electroplating bonding(NMPB)
巽	PD Characteristic on various surfaces treated by different discharge methods in epoxy-based nanocomposite

研究室	修士論文タイトル
池永	Local Spatio-Temporal Propagation and Constraint Based Model Generation for 1ms Foreground Detection System
池永	Texture and Exposure Awareness based Refill for HDRI Reconstruction of Saturated and Occluded Areas
池永	Differential Sampling based Descriptor and View Voting Constraint in Template Matching for Table Tennis Racket Orientation Detection
池永	Multi-level Weight Backwards Pre-analysis and Flexible QP Mapping based Intra-frame Rate-distortion Optimization for Screen Content Coding
池永	Highly-Parallel Hardwired Deep CNN using Condensed Binarization and Hetero Complementation for 1ms Dual-Hand Tracking
池永	Particle Reselection and State Re-search for 1ms Tracking System in Factory Automation
池永	Multi-view 3D Human Pose Reconstruction Based on Spatial Confidence Point Group for Jump Analysis in Figure Skating
池永	Bottom-up Checking and Rate-distortion Ratio based Fast InterIMV Mode in Versatile Video Coding
池永	Spatial Vector Matching and Composite Temporal Constraints Based Multi-Person 3D Pose Reconstruction in Volleyball Games
池永	Self-Supervision and Spatial-Sequential Attention Based Loss for Multi-Person Pose Estimation
木村	Optimizing Binarized Neural Network Architecture with Scaling Factor onto Embedded FPGA Platforms
木村	Seven-valued Convolutional Neural Network for FPGA-based Acceleration
木村	Fanout-oriented Cut-based Logic Synthesis for RRAM-based In-memory Computing Using XOR-Majority Graphs
木村	Accuracy-configurable Low-power Approximate Floating Point Multiplier based on Mantissa Bit Segmentation
木村	A Weighted Tree Combination Method for FPGA-based Random Forests to Improve Accuracy
木村	A CUDA-based Random Forests using Weight Boosting
大澤	Effect of MTJ Switching on Stability of 4T2MTJ Cell
大澤	ReRAM crossbar array design for artificial neural network with on-chip training function based on backpropagation algorithm
大澤	Co-design in Artificial Neural Network using Emerging Memory Crossbar Array
大澤	A Sneak Current Compensation Scheme in 2D/3D-Horizontal ReRAM Crossbar Array
大澤	Research on write time of 6T2MTJ STT-MRAM with background write scheme
大澤	A Study on Reducing the Impact of Wire Resistance in a Neural Network Based on ReRAM Crossbar Array
大澤	Effect and limitation of multi-pair dummy cell average read scheme for high-density emerging memories
大澤	A compact and low power neuromorphic design based on analog voltage driven 1T1C DRAM
大澤	Hardware-Software co-optimization in artificial neural-networks based on ReRAM crossbar array
篠原	A Cascaded-Transistor-Latch-based True Random Number Generator with V_{SS} Biasing for High Yield
篠原	An 8T CMOS SRAM Strong PUF with Low Bit Error Rate Utilizing Hot Carrier Injection
篠原	Machine Learning Resilience Analysis and Design of LUT based Strong PUF with 100 Input Bits
髙畑	A Compact Silicon Electro-Optic Modulator based-on Indium-Tin-Oxide Integrated Directional Coupler with Subwavelength Gratings
髙畑	Vertical Optical Waveguide Comprising Nonuniform Square-base Cuboid Cores for Multilayer Chip-to-Chip Interconnection
髙畑	Analysis on Laser Cleaning Based-on a Multi-physics Model for Rust Removal on Steel Surface.
髙畑	Design of a Silicon Photonic Integrated Circuit based-on Direct Logic for CNN Computing
渡邊	HCP: History-based Congestion Prediction Algorithm for NoC

渡邊	A Fault-tolerant Hamiltonian-based Odd-Even Routing Algorithm for Network-on-Chip
渡邊	A Local Congestion-avoid Routing Algorithm for Network-on-Chip
渡邊	A Fault-tolerant Routing Algorithm for NoC based on Turn Model and XY Routing
吉増	A 28-GHz-Band High Linearity Up-Conversion Sub-Harmonic Mixer with Adaptive Bias in 56-nm SOI CMOS Technology
吉増	A 28-GHz-band high back-off efficiency 4-stacked FET power amplifier IC in 40-nm SOI CMOS technology
吉増	A 28-GHz-band Highly Linear Low Noise Amplifier IC with Adaptive Bias in 40-nm SOI CMOS
吉増	A 14-GHz-Band Low Power LC-VCO IC Using an AC-to- DC Feedback Loop in 40-nm SOI CMOS
吉増	A Wideband LC VCO IC With Novel Varactor Bank in 40-nm SOI CMOS Technology