

## 情報アーキテクチャ分野

研究室	修士論文タイトル
ルパージュ	Reliability of word forms generated in analogical grids
ルパージュ	Extraction of analogical clusters from word embeddings
ルパージュ	Solving analogical equations between sequences of characters using context encoder
ルパージュ	An automatic text elaboration system for L2 learners of Korean
ルパージュ	Retrieval of most similar example sentences for EBMT
ルパージュ	Interpretable sense embeddings based on context clustering
鎌田	Metric Learning based on Outlier Sample Elimination for Person Re-Identification
鎌田	Deep Metric Learning with Histogram Based Online Selection Loss
鎌田	Frontal Gait Recognition from Incomplete RGB-D Streams
鎌田	Enhanced 3D Generative Network for Image Reconstruction
鎌田	Infrared Image Colorization by a S-shape Network
鎌田	Deep Neural Networks with Mixture of Experts Layers for Complex Event Recognition from Images
鎌田	Hybrid Connection Network with Feature Attention for Semantic Image Segmentation
鎌田	Character Recognition in Japanese Historical Documents via Adaptive Multi-Region Model
鎌田	Nuclei Segmentation of Cervical Cell Images Using Intermediate Segment Qualifier
岩井原	Finding high quality documents through link and click graphs
岩井原	Selecting article segment titles based on keyphrase features and semantic relatedness
岩井原	Fast identification of topic burst patterns based on temporal clustering
岩井原	Characterizing SNS Users' posting activities for prediction of user interests
岩井原	Entity Disambiguation Based on Neural Attention Model and Sparse Features
吉江	Recovery of vehicle path based on cellular positioning data
吉江	多段に補助情報を付帯させた相関トピックモデルの提案
吉江	Mining user similarity based on sentiment analysis using twitter corpus
吉江	Image synthesis based on text descriptions using GAN
吉江	Single shot multi-box detector for small scale object
吉江	Asian face recognition with noise label regularization
吉江	Multi-layer intrusion detection system based on time series packet analysis
吉江	Atrous Inception Cascaded Network for Real-time Image Segmentation
吉江	Cross-field generative adversarial networks for image caption generation
吉江	A GAN based autoencoder for disease affected fingerprint recovery
吉江	Eye gaze detection using webcam images

古月	Margin-based Multiple Instance Learning with Auto-encoder
古月	A Convolutional Auto-encoder Method for Anomaly Detection on System Logs
古月	Relation Classification using Coarse and Fine-Grained Networks with SDP Supervised Key Words Selection
古月	A Study of Deep Quasi-linear Kernel Construction Using Semi-supervised Variational Model
古月	Autoencoder-based Feature Extraction Techniques for Protein Function Prediction
古月	A Study of Neural Network Based Kernel Learning for Support Vector Machine
小柳	Study on Traffic-Aware Scheduling in Storm
小柳	The SDN Controller Placement Problem in Large Scale Networks
小柳	Improving Backpressure Mechanism on Storm
小柳	Research on Shuffle Operation Optimization for Spark
小柳	Improving the Restoration for Fast Link Failure Recovery in Large SDN
小柳	Secure Cloud Computing Systems for the Internet of Things
松丸	Implementation of Haptic Feedback in 3D Aerial Holographic Image Interface.
松丸	Application of Proximal Policy Optimization method to Robot Manipulator doing Practical and Abstract Task.
松丸	Path Planner & Mobile Robot Motion Framework for SLAM-less Navigation in Outdoor Pedestrian Environments.
坪川	Study on modal distribution converters with deterministic aperiodic waveguide arrays
坪川	Bit-error-rate evaluation for multi-core fiber transmissions with the space-coding scheme
坪川	Design of nano-sized dielectric waveguides with ultrasmall light spot
坪川	Study on enhancement of the coupling ratio in T-shaped optical splitters
田中	Webカメラを用いた人と物体の認識に関する研究
田中	Aiding episodic memory in lifelog system focusing on user status
田中	GesID: 3D Gesture Authentication by Deep Autoencoder and Incremental Learning
田中	Spatial Note System Using Virtual-Agent to Enhance Family Connection
田中	Lifelog Sharing System based on Context Matching
田中	Augmented Reality Based Actuated Monitor Manipulation from Dual Point of View
田中	A virtual shopping system based on room-scale virtual reality
藤村	Deep Neural Network Model for Short Term Electricity Consumption Forecasting
藤村	Virtual Machine Allocation in Dynamic Cloud Environment using Improved Particle Swarm Optimization
藤村	Flight schedule recovery with ant colony optimization
藤村	Genetic Algorithm with Effective Search Methods for Flexible Job Shop Problems
藤村	Credit card smudges and typographical errors recognition
藤村	A hybrid algorithm based on NSGA-II and SA for solving the Multi-Objective Flexible Job-shop Scheduling Problems
藤村	One-Dimensional Cutting Stock Problem: Optimize Action of Amount of Usable Leftovers in Stock

## 生産システム分野

研究室	修士論文タイトル
犬石	Study on structure and process design of planar and trench type IGBT to enhance the conductivity modulation
犬石	Study on structure and process design of complementary LIGBT on SOI using high energy ion implantation
犬石	Study on structure and process design of guard ring for VDMOS and IGBT
犬石	Study on structure and process design of reverse conducting IGBT (RC-IGBT)
犬石	Study on structure and process design of complementary LDMOS on SOI using high energy ion implantation
犬島	Autonomous Path Tracking Control System based on Magnetic Sensor
犬島	A 6-DoF Localization System based on LiDAR intensity Map and GPS for Autonomous Vehicle
犬島	Automatic Driving System Based on Model Predictive Control
犬島	Driver's Status Detection and Pre-warning System Based on Facial Features Points and Gaze Tracking Method
犬島	Object Detection under Extreme Weather for Autonomous Driving System
犬島	独立成分分析に基づく橋梁劣化診断研究
犬島	A Q-learning Based Particle swarm Algorithm for Optimal Diesel Engine Control Parameters
犬島	Collaborative car-following system based on fuzzy control
三宅	Study on power generation from biofuels with enzyme-coated carbon nanotube fibers
三宅	Study on organic proton devices and materials
三宅	Study on wireless power transfer platform between eyeglasses/soft contact lens
三宅	Study on a protonic biotransducer and its biological application for ionic communication
三宅	Study on Au nanostraw membrane stamping for direct delivery of molecules into adhesive cells
三宅	Study on an electrochromic soft contact lens using flexible and stretchable conductive polymers
清水	Development of optical transillumination system for functional imaging of human foot
清水	Depth estimation of absorbing object in turbid medium from optical transillumination image
清水	Simulation on light propagation in inhomogeneous medium for noninvasive blood turbidity measurement
清水	Development of optical system for noninvasive measurement of blood turbidity
村田	On-demand bus scheduling with service time window based on Genetic Algorithm
村田	Supply chain risk assessment method based on cause-consequence diagram and MIP optimization
村田	Robust project scheduling with multi-mode resource constraints under uncertain activity duration
村田	Market analysis for EV sales forecasting in China based on system dynamics model
村田	容量制約付ネットワークフローモデルを用いた救援物資配送計画の研究
村田	Trend prediction with feature selection based on SVM and Ensemble learning
村田	Sales forecasting based on SVR with keyword filtering of Web search queries

大貝	Multi-Detection System based on CNN with Semantic Segmentation
大貝	Diesel engine NMPC control based on neural network
大貝	Neural network-based monocular camera distance measurement and autonomous driving application for ULV vehicle
大貝	Car Collision Warning System Based on Driver Behavior and Environmental Factors
大貝	Traffic Light Detection for Autonomous Driving System Based on Small Scale Object Recognition
大貝	Driving behavior monitoring and scoring system in safety and economy based on OBD interface and mobile internet
大貝	Semantic Segmentation based on RGB and depth information in driving scenes
大貝	Complicated object detection and bounding box regression based on CNN and optical flow
巽	ビスフェノールF型エポキシ樹脂を用いたポリマーナノコンポジットの絶縁性能に関する研究
巽	スルファミン酸浴を用いたNiマイクロめっき接合による最適めっき条件及び信頼性に関する研究
田中	Motion Planning Optimization of a Standing-up Assistance Device Based on Elderly Motions
田中	Real-time Emotion Recognition System with Multiple Physiological Signals by Deep Neural Networks
田中	Posture Compensated Zero-Moment Point Control Method of the Walking Assistance Apparatus
田中	Development of Wearable Fall Protector based on Self-Folding Origami Structure
田中	Laser Diagnostic Technology to Evaluate Gear Surface Conditions
李	Active Suspension LQG Control of Flexible Railway Vehicle
李	Multiply-Connected BP Neural Network for Thermal Fusion Bonding Control of Panel
李	Drowsy Driving Detection Using Bio-signals and Vehicle Data based on Neural Network
立野	Smart House System via Channel State Information Based on MIMO compatible Wi-Fi
立野	Indoor Position Localization System Based on Fingerprint by using Interpolation Method
立野	呼吸数とストレスインジケータに基づいた運転手眠気検出システム
立野	Improvement of position estimation method in indoor localization system using statistical access point selection with RSSI
立野	Traffic lane line classification system based on monocular vision
立野	Physical activity state estimation in tridimensional space employing Inertial Measure Unit
立野	Development of Walking postures estimation system for Walking training

## 集積システム分野

研究室	修士論文タイトル
吉増	A 15-GHz Band Low Power Class-C LC-VCO in 40-nm SOI CMOS Technology
吉増	A 28-GHz band low power high reverse isolation LNA in 56-nm SOI CMOS
吉増	A 28-GHz High-Linearity, High-Efficiency Power Amplifier with Adaptive Bias in 56nm SOI CMOS
吉増	20-GHz Transformer-based High Tuning Range VCO in 40-nm SOI CMOS
吉増	A 28-GHz Band Low Power High Gain Telescopic Up-conversion Sub-harmonic Mixer IC in 56-nm SOI CMOS
吉増	A 28-GHz High Linearity Sub-harmonic Passive Down-conversion mixer with novel source injection Technique in 56-nm SOI CMOS
吉村	Multiple Voltage Scheduling for Dynamic and Leakage Power Co-optimization in High Level Synthesis
吉村	TSV Assignment of Thermal and Wirelength Optimization for 3D-IC
吉村	Port Assignment for Interconnection Reduction in High-Level Synthesis based on Tabu Search
吉村	Economical Smart Home Scheduling by Cuckoo Search Optimization via Levy Flight
吉村	A Heuristic Optimization Algorithm for Power Scheduling in Smart Homes
吉村	Data Dependency Aware Scheduling Based on Mobility Graph for Partial Reconfigurable Systems
篠原	A New Latch-based True Random Number Generator with Process Variation Tolerance
篠原	A Supply Voltage Range Improved Inverter-based True Random Number Generator in 130nm Process
篠原	Compensation of Temperature Induced Flipping-Bits in CMOS SRAM PUF by NMOS Body-Bias
篠原	Throughput Improvement and Design of Von Neumann Post-Processing Circuit for TRNG
篠原	A 7T SRAM Physical Unclonable Function with High Reproducibility in 130nm CMOS
篠原	A Four-Phase Dual-Rail Pre-Charge Logic for Power Analysis Resistance
篠原	Improvement of Bit Error Rate of EEPUF with Bias Generator and Masking
篠原	NBTI Aging for SRAM PUF Stability Enhancement and Its recovery after Aging
池永	Adaptive-Partial Template Update with Center-Shifting Recovery for High Frame Rate and Ultra-Low Delay Deformation Matching System
池永	Point-to-Camera Search Based Partition and Visible Camera Counting Based Fusion for Hardware-Oriented Parallel Bundle Adjustment
池永	Color Weighted Spatial and HSV-Sobel Alternated Temporal Observation for 60fps 3D Tracking of Twelve Volleyball Players on GPU
池永	Search-Free Linear Projection and Temporal Local Matching for High Frame Rate and Ultra-Low Delay SLAM System
池永	3D Ball Motion and Relative Position Feature Based Start Scene Detection for 60fps Volleyball Game Analysis on GPU
池永	Team Formation and Abrupt Pose Features Based Qualitative Action Recognition for Volleyball Game Analysis
渡邊	Optimal Placement of Through Silicon Vias in 3D Network-on-Chip by Evolutionary Algorithm
渡邊	High Performance 2D Network on Chip by Congestion Control
渡邊	Efficient Simulated Annealing-based Placement Algorithm for FPGA
渡邊	Deterministic Strategies to Improve the Performance of Adaptive Routing Algorithm for NoC

渡邊	A Local-Congestion Managed Routing Algorithm for Network-on-Chip
渡邊	A Novel Communication-aware Algorithm for Online Task Placement on FPGAs
渡邊	Research on Fault Tolerant Routing Algorithm for 3D NoCs
渡邊	A Low-Power and Performance-Aware FPGA Architecture based on Dynamically Controlled Power Gating
馬場	A Proposal of Sentence Level Modeling for Sentiment Analysis Based on CNN and LSTM
馬場	An FPGA-Based CNN Accelerator for Handwritten Digit Recognition
馬場	Face Recognition Based on Signed (+/-) Convolutional Neural Networks
馬場	Semi-supervised Learning Based on Generative Adversarial Nets for Improving Face Recognition Accuracy
馬場	Object Recognition Based on Convolutional Neural Network Using Transfer Learning
木村	Hardware-Oriented Design of Quantized Neural Network Using Fixed-Point Batch Normalization
木村	Topology Optimization Based on Subtree Re-Construction for Low-Power Three Dimensional Gated Clock Tree Synthesis
木村	A High-Speed and Low-Power Approximate Multiplier Based on Radix-4 Partial Product Generation
木村	Multiplier Packing Based on Custom Floating Point with Shared Exponent for Convolutional Neural Networks on FPGA
木村	Obstacle-aware TSV Arrangement and Buffer Insertion in 3D Clock Tree Synthesis
木村	Binarized Residual Neural Network Training and Its Hardware Acceleration
木村	Energy-Efficient and High Performance Approximate Multiplier using Compressors Based on Input Reordering
高畑	Compact multi-channel optical transmitter with flip-chip interconnection for over 400 Gbit/s.
高畑	Study on crosstalk penalty of high-speed multi-channel optical transmitter.
高畑	Research on crosstalk between electroabsorption modulators in high-speed multi-channel optical transmitter.
高畑	Vertical optical waveguide with advanced cube cores for multi-layer chip-to-chip interconnection.
高畑	Evaluation method of crosstalk penalty based on SNR analysis for multi-channel high-speed signals.
高畑	High density optical waveguides with multi-layer structure for chip-to-chip interconnection over 1 Tbit/s
高畑	Low crosstalk transmission lines for high-speed multi-channel optical transmitter.