

## Tokyo Tech Summer Program 2018

Academic supervisors		Participants' research projects
Associate Professor	Mituhiko Fukuda	On Accelerated Gradient Descent Algorithms
Associate Professor	Chihiro Yoshimura	The Effects of Precipitation on Water Quality in Tonle Sap Lake
Professor	Yusuke Shimoyama	Fabrication of Porous Carbon Cathode for Li/Air Battery with Supercritical Drying
Associate Professor	Namhai Pham	Spin injection and Detection in Ferromagnetic (FM) / Semiconductor (SC) Hybrid Structures
Professor	Toshimasa Fujisawa	Focusing Resonators for Surface Acoustic Wave on Anisotropic Material
Associate Professor	Takahiro Shinozaki	Capsule Networks for End-to-End Noisy Automatic Speech Recognition
Professor	Motomu Nakashima	Actuated Scuba Exoskeleton Design
Professor	Mamoru Tanahashi	Analysis of Turbulent Flow Structure for Relation Between Flame and Combustion
Associate Professor	Hiroyuki Akama	Neural Correlates of Supervised versus Unsupervised Artificial Speech Segmentation
Professor	Shinjiro Kanae	Comparative Flood Prevention Analysis of the Tokyo, Paris and New York City Subway Systems
Professor	Yoshitaka Kitamoto	Characterizing Magnetic Behavior of Iron Oxide Nanoparticles in Rheological Samples for Biosensing Applications
Professor	Kei Sakaguchi	Implementation of a Pose Controlled Lighting System using Battery-less, Wireless, Sensor Networks
Associate Professor	Kazuyoshi Fushinobu	Using Ionomer/Carbon Ratio to Determine Macro and Local Resistance in CCL of PEFCs
Professor	Tadahiko Shinshi	Centrifugal Blood Pump Using Bearingless Motor
Associate Professor	Ryuichi Egashira	The removal efficiency of antibiotics from an aquatic environment using different mechanisms
Professor	Susumu Kono	Drift Capacity of Reinforced Concrete (RC) Walls Under Flexural Deformation
Associate Professor	Osamu Jinnouchi	Estimating the signal strength of Gauge Mediated Supersymmetry Breaking at the High Luminosity LHC
Professor	Hidehiko Masuhara	The visualization of primitive values in Live Programming Environments
Associate Professor	Tetsuo Kodera	Study of magnetic fields upon silicon quantum dots towards the interest of quantum computing
Associate Professor	Tadashi Ishida	Fabrication Method of a Microfluidic Device for Tissue Examination
Associate Professor	Yuhei Hayamizu	Molecular Dynamics Simulation of Peptide Self-Assembly on a Boron-Nitride Surface
Associate Professor	Katsumi Yoshida	Development of Microstructure Controlled Alumina
Associate Professor	Hidehiro Uekusa	Crystallography: The Search for New Carbamazepine Cocrystals and Their Characterization
Professor	Masahiko Hara	Surface-Sensitive Spectroscopic Studies of Amino Acid Chemisorption, Polymerization, and Associated Organic Interactions at Anatase Titanium Dioxide (TiO <sub>2</sub> ) Surfaces
Associate Professor	Bunei Sato	Lomb-Scargle Periodogram Analysis for Ground-Based Doppler Asteroseismology
Professor	Nobuyuki Kawai	Short-term flux and colour variability of 3C 279 in the optical band
Professor	Norihiro Nakai	Reusable Architecture: Urban & Architecture Prototype Design
Associate Professor	Hiroshi Sagara	Fast Reactor Designing Study for Proliferation Resistance and Physical Protection Enhancement
Professor	Hiroshi Kimura	Tracking of epigenetic modifications during myoblast differentiation
Associate Professor	Ryo Murata	Roji_a public space in Japanese urban environment
Professor	Feng Xiao	A new time integration scheme for MCV method on cubed-sphere grid for global circulation models
Associate Professor	Yuko Hara	Optimization of Few-Instruction Processors for Embedded Systems
Associate Professor	Hiroki Nakahara	Studying and implementation of deep neural networks on Embedded system
Associate Professor	Takashi Asawa	Courtyard surrounded pitched roofs: effect of roof shading on building energy requirement in southern China