

## G30 自動車工学プログラム/Automotive Engineering Program

## 卒業研究配属および卒研テーマ/List of Laboratories available at the 4th year with the research project samples

学科名:電気電子情報工学科/Department of Electrical Engineering, Electronics, and Information Engineering

研究グループ名(英語)/Group	卒研テーマ(英語)/Research project	研究室URL/Laboratory URL	指導教員/Supervisor	連絡先/Contact person	Mail address
Electric Energy Storage Engineering	Interfacial phenomena on rechargeable batteries	<a href="http://www.nuee.nagoya-u.ac.jp/labs/fukutsuka-lab/index.html">http://www.nuee.nagoya-u.ac.jp/labs/fukutsuka-lab/index.html</a>	Tomokazu FUKUTSUKA	Tomokazu FUKUTSUKA	fukutsuka<at>nuee.nagoya-u.ac.jp
Electric Power Apparatus and Energy Transmission Engineering (S)	High-withstand-voltage solid dielectrics for power generation apparatus, transportation and mobility.	<a href="https://sites.google.com/view/2022kurimotolab">https://sites.google.com/view/2022kurimotolab</a>	Muneaki KURIMOTO	Muneaki KURIMOTO	kurimoto<at>nuee.nagoya-u.ac.jp
Energy Systems Engineering	Integration of EV/PHEV into Electric Power System	<a href="http://www.nuee.nagoya-u.ac.jp/labs/katolab/">http://www.nuee.nagoya-u.ac.jp/labs/katolab/</a>	Takeyoshi KATO	Takeyoshi KATO	tkato<at>nuee.nagoya-u.ac.jp
Power Electronics Group	1. Power Conversion Systems using GaN/SiC Power Semiconductor Devices for Automotive Application 2. Modeling of Power Conversion Systems for Automotive Application and Aircraft Application	<a href="http://pelab.imass.nagoya-u.ac.jp/">http://pelab.imass.nagoya-u.ac.jp/</a>	Masayoshi YAMAMOTO	Masayoshi YAMAMOTO	m.yamamoto<at>imass.nagoya-u.ac.jp
Advanced Energy Science, Plasma Energy Group	Metallic nanostructure formation by plasma irradiation for photocatalysis application	<a href="http://www.nuee.nagoya-u.ac.jp/labs/plaene/">http://www.nuee.nagoya-u.ac.jp/labs/plaene/</a>	Noriyasu OHNO	Noriyasu OHNO	ohno<at>ees.nagoya-u.ac.jp
Space Electromagnetic Environment (Space Observation)	Studies on electromagnetic environment of geospace around the Earth using radars, GPS receivers, optical interferometers, and satellites.	<a href="https://www.isee.nagoya-u.ac.jp/dimr/index_e.html">https://www.isee.nagoya-u.ac.jp/dimr/index_e.html</a>	Kazuo SHIOKAWA	Kazuo SHIOKAWA	shiokawa<at>nagoya-u.jp
Space Information Engineering (Data analysis and Computer Simulation on Sun and Space Environment)	1. Studies on plasma environment of Sun, Solar wind and Geospace by using data analyses on the satellite/ground-based observations based on information science techniques and numerical experiments based on high-performance computing techniques. 2. Studies for the prediction of solar activities and space environment (space weather) by using the state-of-art artificial intelligence (AI) / data assimilation / machine learning techniques.	<a href="https://is.isee.nagoya-u.ac.jp/en/">https://is.isee.nagoya-u.ac.jp/en/</a>	Yoshizumi MIYOSHI	Yoshizumi MIYOSHI	miyoshi<at>isee.nagoya-u.ac.jp
Plasma Electronics	Surface Wettability Control by Plasma Treatment	<a href="http://www.nuee.nagoya-u.ac.jp/labs/toyodalab/E/index.html">http://www.nuee.nagoya-u.ac.jp/labs/toyodalab/E/index.html</a>	Hirotaika TOYODA	Hirotaika TOYODA	toyoda<at>nuee.nagoya-u.ac.jp
Materials and Device Processing Research Group, Nano Process Laboratory	Novel fuel cell device based on nanocomposite materials and plasma nano-processing	<a href="https://horilab.nuee.nagoya-u.ac.jp/en/home.html">https://horilab.nuee.nagoya-u.ac.jp/en/home.html</a>	Kenji ISHIKAWA Hiromasa TANAKA	Kenji ISHIKAWA Hiromasa TANAKA	ishikawa<at>plasma.engg.nagoya-u.ac.jp htanaka<at>plasma.engg.nagoya-u.ac.jp
	High-performance GaN power devices developed by advanced plasma technologies				
	Surface functionalization technology for car engineering by advanced plasma treatments				
Semiconductor Engineering and Integration Science	Material Characterization and Processing for Advanced Semiconductor Devices	<a href="http://www.nuee.nagoya-u.ac.jp/labs/miyazakilab/">http://www.nuee.nagoya-u.ac.jp/labs/miyazakilab/</a>	Seiichi MIYAZAKI	Seiichi MIYAZAKI	miyazaki<at>nuee.nagoya-u.ac.jp
Advanced Devices	Materials Characterization for Advanced Semiconductor Power Devices	<a href="http://sudalab.skr.jp/">http://sudalab.skr.jp/</a>	Jun SUDA	Jun Suda	suda<at>nuee.nagoya-u.ac.jp
Quantum Opto-Electronics	Ultrashort pulse fiber lasers for advanced metrology and biomedical imaging	<a href="http://www.nuee.nagoya-u.ac.jp/labs/optelelab/en/index_en.html">http://www.nuee.nagoya-u.ac.jp/labs/optelelab/en/index_en.html</a>	Norihiko NISHIZAWA	Norihiko NISHIZAWA	nishizawa<at>nuee.nagoya-u.ac.jp
Quantum Integration Devices Group	Quantum-Based Superconductor Circuits	<a href="http://www.super.nuqe.nagoya-u.ac.jp/en/index.html">http://www.super.nuqe.nagoya-u.ac.jp/en/index.html</a>	Akira FUJIMAKI	Akira FUJIMAKI	fujimaki<at>nuee.nagoya-u.ac.jp
Nano information devices	Crystal growth of nitride-based micro LEDs displays, LDs, power devices, and high frequency devices	<a href="http://www.semicond.nuee.nagoya-u.ac.jp/english/index.html">http://www.semicond.nuee.nagoya-u.ac.jp/english/index.html</a>	Hiroshi AMANO	Hiroshi AMANO	amano<at>nuee.nagoya-u.ac.jp
Nano-spin Devices Group	Development of High Performance Magnetic Sensors	<a href="http://www.nuee.nagoya-u.ac.jp/labs/kato-lab/index_e.html">http://www.nuee.nagoya-u.ac.jp/labs/kato-lab/index_e.html</a>	Takeshi KATO	Takeshi KATO	takeshi<at>nuee.nagoya-u.ac.jp
Nano-electron devices	Carbon nanotube-based electron devices	<a href="https://nanoflex.jp/public-j/">https://nanoflex.jp/public-j/</a>	Yutaka OHNO	Yutaka OHNO	yohno<at>nagoya-u.jp
International Research Section	Innovative III-Nitride material research	<a href="http://mp.imass.nagoya-u.ac.jp/">http://mp.imass.nagoya-u.ac.jp/</a>	Markus PRISTOVSEK	Markus PRISTOVSEK	pristovsek<at>imass.nagoya-u.ac.jp
Visual Information Group	Image and Video Processing	<a href="http://www.fujii.nuee.nagoya-u.ac.jp/index-e.html">http://www.fujii.nuee.nagoya-u.ac.jp/index-e.html</a>	Toshiaki FUJII	Toshiaki FUJII	fujii<at>nuee.nagoya-u.ac.jp
Information Networks Group	Next-generation optical network architecture / Machine-learning-based optical transmission technologies	<a href="http://www.nuee.nagoya-u.ac.jp/labs/satolab/en/index.html">http://www.nuee.nagoya-u.ac.jp/labs/satolab/en/index.html</a>	Hiroshi HASEGAWA	Hiroshi HASEGAWA	hasegawa<at>nuee.nagoya-u.ac.jp
Advanced Information Environment Group	Big data analysis for Location based Information Systems	<a href="http://www.ucl.nuee.nagoya-u.ac.jp/">http://www.ucl.nuee.nagoya-u.ac.jp/</a>	Nobuo KAWAGUCHI	Takuro YONEZAWA	takuro<at>nagoya-u.jp
Information Engineering Group	Design and analysis of cryptographic primitives	<a href="http://www.nuee.nagoya-u.ac.jp/labs/tiwata/index.html">http://www.nuee.nagoya-u.ac.jp/labs/tiwata/index.html</a>	Tetsu IWATA	Tetsu IWATA	iwata<at>cse.nagoya-u.ac.jp
Wireless Systems	Theories and Applications of Wireless Communication Systems	<a href="http://www.katayama.nuee.nagoya-u.ac.jp/index-e.php">http://www.katayama.nuee.nagoya-u.ac.jp/index-e.php</a>	Hiraku OKADA	Hiraku OKADA	okada<at>nuee.nagoya-u.ac.jp
Communication Theory	Visible Light Communication	<a href="https://yamazato.nuee.nagoya-u.ac.jp/en/">https://yamazato.nuee.nagoya-u.ac.jp/en/</a>	Takaya YAMAZATO	Takaya YAMAZATO	yamazato<at>nagoya-u.jp
Intelligent Systems	Human-Agent Interaction	<a href="http://ssl.nuee.nagoya-u.ac.jp">http://ssl.nuee.nagoya-u.ac.jp</a>	Satoshi SATO Kohei OGAWA	Kohei OGAWA	k-ogawa<at>nuee.nagoya-u.ac.jp
Information Systems (Control Systems) Group	Advanced system control of Vehicle and Robot	<a href="http://doki-n.nuee.nagoya-u.ac.jp/">http://doki-n.nuee.nagoya-u.ac.jp/</a>	Shinji DOKI	Shinji DOKI	doki<at>nagoya-u.jp
Acoustic Speech and Behavior Signal Processing Group	Modeling of traffic/vehicle and driver behaviors	<a href="http://takedalab.g.sp.m.is.nagoya-u.ac.jp/">http://takedalab.g.sp.m.is.nagoya-u.ac.jp/</a>	Kazuya TAKEDA	Kazuya TAKEDA	takeda<at>is.nagoya-u.ac.jp
	In-vehicle speech and acoustic systems				
	In-vehicle human-computer interaction systems				

\* Please change &lt;at&gt; to @ in an email address of each faculty member.