

# Kota Fujimoto

PHD STUDENT

The University of Tokyo, Kashiwa, Japan

✉ fujimoto.kota21@ae.k.u-tokyo.ac.jp

## Education

---

### The University of Tokyo

PHD ENGINEERING

- Advisor: Dr. Hiroshi Fujimoto

Kashiwa, Japan

2023 - present

### The University of Tokyo

MSC ADVANCED ENERGY

- Advisor: Dr. Hiroshi Fujimoto

Kashiwa, Japan

2021 - 2022

### The University of Tokyo

BENG AERONAUTICS AND ASTRONAUTICS

- Advisor: Dr. Koji Uenishi

Tokyo, Japan

2017 - 2020

## Conference and Presentation

---

### PEER-REVIEWED

**K. Fujimoto**, T. Hamada and H. Fujimoto, "Proposal on Model Based Current Overshoot Suppression of Receiver Side Coil in Drone Wireless Power Transfer System," in IEEE 2022 Wireless Power Week (WPW), pp. 235-239, Bordeaux, France, 2022, doi: 10.1109/WPW54272.2022.9854039.

**K. Fujimoto**, S. Nagai, B. M. Nguyen, H. Fujimoto, "Test Bench Study on Attitude Estimation in Ground Effect Region Based on Motor Current for In-Flight Inductive Power Transfer of Drones," in IEEE 2023 The 49th Annual Conference of the IEEE Industrial Electronics Society (IECON), Singapore, 2023 (To be presented).

Y. Sato, **K. Fujimoto**, R. Matsumoto, S. Nagai, B. M. Nguyen, H. Fujimoto, "Basic Study on Received Power Control of In-Flight Inductive Power Transfer for Drones by Active Rectifier Switching and Altitude Regulation," in IEEE 2023 The 49th Annual Conference of the IEEE Industrial Electronics Society (IECON), Singapore, 2023 (To be presented).

### NON-PEER-REVIEWED

**K. Fujimoto**, K. Yokota, S. Nagai, H. Fujimoto, "Modeling and Verification of Pitch-Dependent Coupling Coefficient for WPT to Flying Drone," in IEE-Japan 2021 Industry Applications Society Conference (JIASC), No. 48, Nagaoka University of Technology, 2021.

**K. Fujimoto**, O. Shimizu, H. Fujimoto, J. Katsuya, T. Sato, "Requirement Analysis for Dynamic Wireless Power Transfer with Big Data from Real Vehicles," in IEE-Japan Joint Technical Meeting on Power Engineering/Power Systems Engineering/Semiconductor Power Converter (SPC), No. SPC23140, Okinawa, 2023.

Y. Sato, **K. Fujimoto**, R. Matsumoto, S. Nagai, B. M. Nguyen, H. Fujimoto, "Basic Study on Flight Altitude and Battery Current Control in In-Flight Wireless Power Transfer for Drones," in IEE-Japan Joint Technical Meeting on Power Engineering/Power Systems Engineering/Semiconductor Power Converter (SPC), No. SPC23141, Okinawa, 2023.

**K. Fujimoto**, H. Fujimoto, Y. Isaoka, Y. Terada, "High Precision Control for Twin-Drive System of Machine Tool Based on Mode Decoupling with Virtual Viscosity: Basic Study on Two-Inertia System," in IEE-Japan Technical Meeting on Mechatronics Control (PSS), No. MEC23011, Tokyo, 2023

## Awards, Fellowships, & Grants

---

### AWARDS

- 2022 **IEEJ Excellent Presentation Award**, The Institute of Electrical Engineers of Japan  
**APET Excellent Poster Presentation Award 3rd Prize**, Center for Advanced Power & Environmental Technology

## FELLOWSHIP

- 2023 **Fostering Advanced Human Resources to Lead Green Transformation (SPRING GX)**, The University of Tokyo

## GRANT

- 2022 **Researcher Overseas Training Grant**, Suzuki Foundation  
2023 **Overseas Travel Expense Assistance**, The Telecommunications Advancement Foundation

## Teaching/Supervising Experience

---

- 2021-2023 **Graduate Teaching Assistant**, Electrical and Electronic Engineering, The University of Tokyo

## Outreach & Professional Development

---

### SERVICE AND OUTREACH

- 2022 **Workshop in Kashiwanoha innovation festival**, Operational Stuff at Craft Construction *Chiba*  
Course of Dynamic Wireless Power Transfer  
2022-2023 **School Festival**, Operational Stuff at Lab Introduction exhibit *Tokyo*

### INTERNSHIP

- 2022 **ACSL Ltd.**, R&D Mechatronics team *Tokyo*  
2023 **Université de technologie de Compiègne**, Project internship student *France*

### PROFESSIONAL MEMBERSHIPS

The Institute of Electrical and Electronics Engineers Graduate Student Member  
The Institute of Electrical Engineers of Japan Society Student Member  
The Japan Society for Aeronautical and Space Sciences Student Member