

# The 33<sup>rd</sup> JUACEP Workshop

## 2024 Summer Research Course, Track A

**Date**     **13:30 - 17:00**     **August 8, 2024**  
**Venue**   **TEL Auditorium (3F, EI Bldg.)**

No prior registration required.

- 13:30     Opening address by Prof. T. Matsumoto, JUACEP Committee
- 13:35     (1) Seoyeong Park    Advisor: Prof. N. Kawaguchi, Information & Communication Eng.  
            “Clustering-Based Multitask Classification for Predictive Consumer Behavior Modeling”
- 13:50     (2) Utkarsh Srivastava   Advisor: Prof. T. Fujii, Information & Communication Eng.  
            “Region of Interest Based Medical Image Compression”
- 14:05     (3) Xiaoyue Wu    Advisor: Assoc. Prof. K. Fujii, Intelligent Systems  
            “Optimization for Robust Lidar SLAM Framework for Predictive World Modeling Integration”
- 14:20     (4) Raphaël Plante    Advisor: Prof. T. Matsumoto, Mechanical Systems Eng.  
            “Educational Exploration of Topology Optimization: Key Concepts of the Exact Volume Constraint Method”
- 14:35             Break time
- 14:45     (5) Jacob Kokinda    Advisor: Prof. N. Nishizawa, Electronics  
            “All-PM Tm-doped Ultra Short Pulse Fiber Laser Using SWNTs”
- 15:00     (6) Gavin Silveira    Advisor: Prof. T. Kato, Electrical Eng.  
            “Impact Assessment of Combination of Secondary and Tertiary Reserve Capacity Flexibility for Reducing Operating Costs in Power Systems with High Penetration of PhotoVoltaic Power in Japan”
- 15:15     (7) Melody Polk    Advisor: Advisor: Prof. H. Tomita, Applied Energy  
            “Improvements in Cavity Ring-Down Spectroscopy for Tritiated Water Analysis”
- 15:30     (8) Maria Acuna    Advisor: Assoc. Prof. K. Kinefuchi, Aerospace Eng.  
            “SWBLI Mitigation via Cryogenic Cooling: Numerical and Experimental Analysis”
- 15:45             Break time
- 15:55     (9) Edith Shear    Advisor: Assoc. Prof. K. Kinefuchi, Aerospace Eng.  
            “Thrust Characteristics of Diverging Magnetic Field Thrusters”
- 16:10     (10) Mohamed Diop    Advisor: Prof. A. Yoshimura, Aerospace Eng.  
            “Comparative Study of Virgin and Recycled CFRPs Characteristics”
- 16:25     (11) James Fernandez   Advisor: Prof. J. Kasahara, Aerospace Eng.  
            “Synchronization of Dual Rotating Detonation Engines with Straight and Diverging Nozzles”
- 16:40             Completion ceremony: Address from Dean, Prof. M. Kobashi

The participants will deliver presentations (10mins. + Q&A 4mins.)  
based on their research topics of the home universities and NU.

Inquiry: JUACEP Office  
052-789-2799  
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Japan-US-Canada Advanced  
Collaborative Education program



Program Website

# The 33<sup>rd</sup> JUACEP Workshop II

## 2024 Summer Research Course, Track B

Date:

10:30-11:15

August 29,  
2024

Venue:

TEL Auditorium,  
EI Bldg. 3F



Japan-US-Canada Advanced  
Collaborative Education program

The participants will  
deliver presentations  
(10mins. + Q&A 4mins.)  
based on their research  
topics of the home  
universities and NU.

10:30 – 10:35

Opening address: Prof. Yasumasa Ito,  
JUACEP Committee

10:35 – 10:50

(1) Yukteshwar Ravi, "Development of  
a Novel Haptic System using a 3D Vibration  
Motor"

Adviser: Prof. Tsuyoshi. Inoue, Mechanical  
Systems Engineering

10:50 – 11:05

(2) Rosemary He, "Statistical Testing on  
Generative AI Anomaly Detection Tools in  
Alzheimer's Disease Diagnosis"

Adviser: Prof. Ichiro Takeuchi, Mechanical  
Systems Engineering

11:05 – 11:15

Completion ceremony

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