

Yuki Minai

Education

Carnegie Mellon University, Pittsburgh

September 2021 - Present

Ph.D. in Neural Computation and Machine Learning Program, GPA: 3.71

Matthew Smith Lab and Byron Yu Lab, Neuroscience Institute

- Developing a brain electrical stimulation framework to control neural population activity
 - Runs simulations to design a data-driven closed-loop electrical stimulation paradigms
 - Tests a closed loop stimulation paradigms by running the experiment with non-human primates
- Analysis of the effect of electrical stimulation in the prefrontal cortex to behavior
 - Analyzes how the electrical stimulation alters the neural population activity by using dimensionality reduction techniques and how the altered neural activity impacts behavior, in particular, reaction time during a sensory-motor task

New York University, New York

September 2019 - May 2021

Master of Arts and Science in Psychology, GPA: 3.91

Kiani Lab, Center for Neural Science, Research Scientist

- Assessment of monkey's prospective planning ability using a sequential maze task
 - Conducted behavioral training and experiments of three macaque monkeys
 - Analyzed monkeys' behavioral data using descriptive statistics and logistic regression in Python
 - Developed a new experiment to test prospective planning abilities of humans and monkeys

OIST Computational Neuroscience Course 2019, Okinawa

July 2019 - August 2019

- Examined temporal correlation effects on identifying neuron coding values in rat decision making
- Evaluated the effects of different parameter settings of reinforcement learning on the reproduction of individual differences in rat decision making

Nara Women's University, Nara

April 2009 - March 2013

Bachelor of Science in Mathematics, GPA: 3.62

Poster Presentations

- *"Robustness of PFC networks under inter and intra-hemispheric patterned microstimulation perturbations"*, Joana Soldado-Magraner, **Yuki Minai**, Matthew Smith and Byron Yu, Cosyne Conference 2023
- *"Inter-areal patterned microstimulation selectively drives PFC activity and behavior in a memory task"*, Joana Soldado-Magraner, **Yuki Minai**, William Bishop, Matthew Smith and Byron Yu, Cosyne Conference 2022
- *"Macaque monkeys use a prospective decision strategy for multi-step navigation in a maze"*, **Yuki Minai**, Gouki Okazawa, John J Sakon, Roozbeh Kiani, The Annual Conference JNNS 2020
- *"Examination of temporal correlation effects on identifying neurons coding values for actions"*, **Yuki Minai**, Makoto Ito, Kenji Doya, OIST Computational Neuroscience Course 2019
- *"Validation of Decision-Making Models capturing individual differences"*, **Yuki Minai**, Cliff Kerr, Makoto Ito, Kenji Doya, OIST Computational Neuroscience Course 2019

Award & Fellowship

- Japan Student Service Organization Scholarship (August 2021 - July 2024)
- The second best presentation award, The 25th Annual NYU Masters Psychology Research Conference

Teaching Experience

EDGE Technology Inc, Tokyo **October 2018 - August 2021**
Teaching Assistant

- Supporting AI jobcolle, an AI specialist training course through the creation of homework problems

Rakuten IT School Program, Hyogo **April 2017 - March 2018**
Part-time Lecturer

- Contributed to promoting the local high school students' understanding of electronic commerce as a one-year special part-time lecturer

Nara Women's University Secondary School, Nara **May 2011 - June 2011**
High School Teaching Intern

- Designed the class curriculum for a junior high school level mathematics class and taught the classing using developed materials

Professional Experience

ABEJA, Inc., Tokyo **January 2019 - June 2019**
Data Scientist, Insight for Retail Development Team

- Using a causal inference machine learning model, developed a new function of Insight for Retail (platform supporting store business optimization based on customer behavior data) to identify the factor most critical to the increase of each shop's sales

Rakuten, Inc., Tokyo **October 2015 - March 2018**
Assistant Manager, Merchant Strategy Group, Planning Department, E-Commerce Company

- As project manager of "Merchant Net Promoter Score (NPS) improvement project", analyzed in-house big data and survey data from 45,000 merchants in the biggest E-commerce platform in Japan to improve the merchant management system, marketing tools, and customer support by collaborating more than 50 employees
- As a project manager and data scientist, led a team of five to develop a Business Intelligence (BI) tool called Rakleau for productivity improvement of over 500 E-commerce consultants who support merchants to increase their sales

Kyocera Communication Systems Co. Ltd., Tokyo **April 2013 - July 2015**
Data Scientist, Technical Development Team, Business Development Group, Internet Media Department

- Developed a click rate prediction model for internet-based advertising system to improve targeting

Skills & Certificates

Skills

- Programming Languages (Python, Matlab, R, Java, SQL, HiveQL, PostgreSQL)
- BI tools (Tableau, DOMO)

Certificates

- Statistical Society Certificate Grade-Pre 2
- AI Jobcolle Machine Learning Course Certificate of Completion
- Oracle Certified Professional, Java SE 6 Programmer
- First class junior/senior high school teaching certificate, Mathematics, Japan

Languages

- Japanese, Native proficiency
- English, Bilingual proficiency