Recruitment Information on 2023 Internship

Department	Department of Decoded Neurofeedback, Computational Neuroscience Laboratories (CNS), Advanced Telecommunications Research Institute International (ATR)
Website	ATR: https://www.atr.jp/index_e.html CNS: https://bicr.atr.jp/en/home-3/cns/
Length of Internship	Start date Any time, up to 12 months
Business Description	ATR is a core institute of Keihanna Science City in Kansai region. We promote pioneering and innovative research in information and communication-related fields with global collaboration among industry, academia and government. Outstanding research outcomes have been steadily achieved in such fields as computational neuroscience, deep human-robot interaction, wireless and communications, and life science. ATR is also taking initiatives to build and develop a global innovation ecosystem in the Keihanna Science City, and is working to commercialize research outcomes. [CNS] We aim to understand brain functions through computational modelling, and develop Brain Machine Interfaces (BMI) leading to improved AI and clinical applications , such as for the recovery of motor functions in humans.
Work Hours	7 hours and 30 minutes per day (except rest breaks)
Day-off	Saturdays, Sundays, Public holidays and Five day summer holidays set by the company
Job Description/ Responsibilities	ATR-CNS (supervised by Dr. Aurelio Cortese) Neural basis of uncertainty in learning In this project we aim to better understand the neural and computational mechanisms allowing strategic decision-making. We will investigate the role of metacognition in arbitrating between alternative strategies based on error signals. Specifically, we hope to uncover how patterns of activity representing learning or error predictions in the basal ganglia and cingulate cortex, may be used explicitly by the prefrontal cortex to update action and decision policies. The work can be based on the use of statistical and machine learning techniques applied to fMRI and/or ECoG datasets, computational modeling of behavior, and/or neural network simulations.
Required skills, qualifications and special requirements	The candidate is expected to have good command of programming (one or more among Matlab, Python, R, c/c++). Knowledge of fMRI preprocessing, data analysis techniques, statistics, and/or computational modelling are a plus but not explicitly required.
Required Japanese Language Skill	NIL
Accommodation	A company-subsidized apartment will be provided. bathroom and kitchen, might be shared. Utility charges must be paid by the student. (not deducted from salary) *Moving out the apartment shall not be accepted for the first six months. *A long-stay hotel might be provided instead of the apartment.
Distance from accommodation	Within 5 Km

Monthly student living allowance	Undergraduate: JPY 224,000 /Monthly
	Graduate: JPY 245,000 /Monthly
	   ▪ Before deductions of income tax (20% of the amount of income), apartment rent (around 60,000 yen/month) and social insurance fee (around 30,000 yen/month)
	▪ Travel costs of commuting and business trips: Paid
	▪ Housing allowance: Rent – 11,000 yen/month
	   ▪ Up to a ceiling of 30,000 yen
	▪ Social insurance
	   ▪ Applied if the length of internship is 2 months or more
	   ▪ Including health insurance and pension
	   ▪ Covered for the exact period of the internship contract
	   ▪ The health insurance enables the insured person to receive medical care including dental treatment by a medical doctor with 30% of the cost.
	Regarding the pension, withdrawal refunds can be claimed after leaving Japan if you have paid the fee for 6 months or more, and the amount of refund is around 70,000 yen.

Airfare coverage	NIL
Required documents for application	Resume and Recommendation letter
Close of application	February 10th, 2023