■ Job Information

Subject No.	2027R-88
Job Title	Fixed Term Researcher
Department	Cybersecurity Research Institute / Center for Research on AI Security and Technology Evolution
Work Contents （Research theme）	Research on AI-Based Software Security Evaluation and Vulnerability Analysis
Detail of Work Contents	The AI Security Research Center promotes research and development aimed at advancing software security evaluation, vulnerability discovery and analysis, and the automation and enhancement of these processes through the use of artificial intelligence (AI) technologies, in response to increasingly sophisticated cyberattacks and the growing scale and complexity of software systems. In this position, the researcher will engage in research and development of new technologies for efficiently discovering and analyzing vulnerabilities in software by combining AI technologies, including large language models (LLMs), with software analysis techniques such as fuzzing, static analysis, and dynamic analysis. Depending on the candidate's experience, expertise, and suitability, the researcher will be responsible for one or more of the following research topics: · Research and development of methods for detecting and analyzing software vulnerabilities using AI technologies such as large language models (LLMs) · Research and development of vulnerability discovery techniques that combine AI with fuzzing, static analysis, dynamic analysis, program analysis, and related techniques · Research on the automation and advancement of vulnerability discovery, test case generation, code analysis, root-cause analysis of vulnerabilities, and related tasks using AI · Research and development of AI-based security analysis techniques for source code, binaries, runtime information, and other software-related data · Research and development of evaluation methodologies, datasets, and benchmarks for assessing the effectiveness of vulnerability detection and analysis methods · Design, implementation, and experimental evaluation of prototype systems and vulnerability detection and analysis tools based on research outcomes Researchers will define specific research topics based on the latest domestic and international research trends and relevant technologies. They will propose new methods, design and implement systems or techniques, and conduct experiments, evaluations, and analyses. Researchers will also disseminate their research findings domestically and internationally through peer-reviewed academic papers, international conferences, and other venues, and are expected to pursue research and development proactively and independently. The Article 15(2) of the Act on the activation of Science, Technology and Innovation will be applied to this work content.
	Employees to be hired through this recruitment are obliged to concentrate on their duties.
Application requirement	A doctoral degree in engineering, information science, computer science, or a related field, or equivalent research capabilities and achievements. A proven research record in cybersecurity, software engineering, program analysis, artificial intelligence, machine learning, or another field relevant to this research, including publications in peer-reviewed journals or conference proceedings. Fundamental knowledge of software security and AI is required. Specialized knowledge or research experience in one or more of the following areas is preferred: · Software vulnerability detection and analysis · Fuzzing, static analysis, dynamic analysis, or program analysis · Source code or binary analysis · Software analysis using machine learning or deep learning · Code generation or analysis using large language models (LLMs) or generative AI · AI-based vulnerability detection, security testing, or program analysis The ability to independently implement research ideas and conduct experiments and evaluations using programming languages such as Python and C/C++. Experience in building research prototypes by combining existing analysis tools, AI models, open-source software, and related technologies is preferred. The ability to investigate and analyze domestic and international research trends, independently define research topics, and proactively pursue research. Strong communication and collaboration skills are also required to conduct research in cooperation with domestic and international researchers. Candidates must be able to read and write academic papers in English and present research findings in English.
Recruiting (Number of people)	1
Contract period	hiring date ～ March 31,2028 N.B. Contract could be renewed.
The employment period in case of fully renewing	Up to 5years if certain conditions are fulfilled
Salary (basic salary)	¥541,000 ～ ¥558,000/month Basic salary shall be determined by taking into account each employee's experience and task to be engaged in. However, as a basic salary is compliant with government employees' wages, it shall be changed when a basic salary is changed after labor union and the like of NICT agreed under a revision to the government employees' wages.
Work Place	Innovation Center (Chiyoda-ku, Tokyo)
Working frequency	5days/week（7.5hours/day）

* Scope of change in work and workplace：No changes are expected in general
* The expressions used in "Work Contents (Research theme)" and "Detail of Work Contents" and the names of "Department" and "Work Place" may be subject to change due to organizational restructuring or other reasons.

NICT Fixed Term Positions Job Announcement: https://www.nict.go.jp/en/employment/index-e-top.koubo.html