



Nintendo European  
Research & Development

## JOB OFFER

### EMBEDDED SECURITY ENGINEER

### RESEARCH & DEVELOPMENT ENGINEER (M/F)

#### THE COMPANY

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Nintendo European Research and Development (NERD) is a French subsidiary of Nintendo. We are a company of about 75 employees who share a passion for creating key software technologies and cutting-edge solutions deployed on a wide scale of homogeneous devices. Working in close collaboration with counterparts in Japan and USA, we contribute to emulation, signal processing, content generation, computer vision, machine learning, system development, optimization and security for Nintendo 3DS™, Nintendo Switch™ and other Nintendo platforms. Come discover an engaging and welcoming work environment in the heart of Paris and join our unique team in its mission to put smiles on people's faces!

#### POSITION DUTIES

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NERD is looking for an experienced Embedded Security Engineer who will contribute to our internal expertise and push the state of the art in the following ways:

- Vulnerability discovery and exploitation
- Cryptographic algorithms and their modes of operation
- Secure boot design and implementation
- Operating System architecture and security, especially micro-kernels
- Design and code reviews
- White-box and Black-box testing
- Work within an international team to design and implement embedded system security projects
- Write code for security projects

#### CANDIDATE PROFILE

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We are looking for candidates who:

- **Already have field experience in embedded security**
- Are team players
- Are eager to learn, improve their skills and share their knowledge
- Aim for the best but know when to be pragmatic when faced with engineering problems
- Recognize the constraints and tradeoffs of production environments and deploying software to millions of users
- Are perseverant and attentive to detail
- Have a good general computer science culture
- Have a good knowledge of C/C++
- Have a good knowledge of debugging techniques
- Have a good knowledge of common cryptographic algorithms
- Have knowledge in assembly language and reverse engineering
- Have knowledge about hardware security
- Have knowledge about side channel attacks
- Have experience exploiting browsers

Ideally, candidates would have experience in hacking complex security embedded systems (preferably video-game consoles).

We expect candidates to be proficient in English, both written and spoken. Knowledge of French and Japanese is appreciated. Eligibility to work in the EU is required and candidates are expected to relocate near Paris.

The application process consists of two stages. In the first stage, candidates are asked to work on an exercise, for which we already have solutions. In the second stage, candidates who've provided satisfactory results will proceed to interviews with our engineers and managers.

#### CONTACT

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If you believe you are the right person for this position, please send a resume and a cover letter to [apply@nerd.nintendo.com](mailto:apply@nerd.nintendo.com) with **SECU2022** in the subject line.