Jules Royet

M: +33673440883 | E: jules.royet.pc@gmail.com
LI: https://www.linkedin.com/in/jules-royet/ | WB: https://www.julesroyet.fr/

EDUCATION

Enseirb-Matmeca Engineering School   **Sept 2022 to Present**
- Master of Engineering (Computer Science, Networks)
- Focus Track: Software Development, Network Conception, Cybersecurity, AI
- Expected Date of Graduation: May 2025

University of Bayonne   **Sept 2020 to June 2022**
- Technical Diploma (Computer Science)
- Focus Track: Software Development, Project Management, Database Management

WORK EXPERIENCES

Orange   **France**
Software Engineer Apprentice   **Sept 2022 to Present**
- Developed sustainable digital solutions for the online store of French telecommunications leader, leveraging a tech stack including Spring, Kotlin, Vue, Node.js, and MongoDB.
- Engineered an internal ecological impact calculator for business applications (covering scopes 1, 2, and 3), integrating sustainable by design, Green IT practices.
- Collaborated within Agile teams by authoring detailed user stories on Jira and maintaining comprehensive project documentation in Confluence.
- Implemented robust testing methodologies—including unit tests with Jest, integration tests using Hurl, and end-to-end tests via Cypress—to ensure high software reliability and performance.
- Deployed CI/CD pipelines on GitLab and managed containerized orchestration with Docker and Kubernetes to streamline development and operational efficiency.

Market Control   **Spain**
Software Engineer Intern   **May 2023 to Aug 2023**
- Developed a new web platform using JS with the OpenUI5 framework to enhance user experience and interface consistency.
- Implemented automated testing strategies with Opa5 to ensure robust application functionality and performance.
- Configured and integrated GitHub Actions for CI/CD workflows, streamlining development and deployment processes.
- Deployed the application using Docker and SAP BTP, ensuring flexible and scalable cloud-based operations.
- Engineered and managed database systems, including HANA and MariaDB, dynamically linking the application to deployment locations via CDS tools.

CDG33   **France**
Full-Stack Developer Intern   **Apr 2022 to Jul 2022**
- Conceived and developed a web application for scheduled SMS sending and an intuitive administrative interface using PHP Symfony, MySQL, and Doctrine ORM.
- Integrated a REST API for SMS dispatch, ensuring reliable and efficient communication services.
- Conducted solution analysis and delivered a ChatBot proof of concept for the public website of CDG33.
- Managed the project following a classical V-cycle approach to ensure systematic delivery and quality assurance.

ACADEMIC PROJECTS

Enseirb-Matmeca Engineering School   **Jan 2025 to Feb 2025**
Adversarial Perturbations in Deep Neural Networks
- Examined the vulnerability of state-of-the-art deep neural networks to universal adversarial perturbations using the DeepFool algorithm on models such as Google Inception.
- Developed algorithms to compute image-agnostic perturbations that misclassify natural images with high probability.
- Analyzed the generalization of universal perturbations across different neural network architectures and datasets.
- Investigated the geometric correlations in decision boundaries to understand the susceptibility of classifiers to such perturbations.
- TensorFlow, Python, NumPy, and Jupyter Notebook tech stack.

Enseirb-Matmeca Engineering School   **Mars 2024 to Apr 2024**
Design and Implementation of a LoRa-based LPWAN for IoT Applications
- Configured and deployed a LoRa network using Waspmote devices and LoRa SX1272 modules for IoT data transmission.
- Developed and tested sensor nodes to simulate temperature data and transmit it to a LoRa gateway using JSON format.
- Implemented acknowledgment (ACK) and retransmission mechanisms to ensure reliable data delivery in the network.
- Analyzed network performance and optimized parameters such as frequency, power, and payload size for efficient communication.

Enseirb-Matmeca Engineering School   **Jan 2024 to Feb 2024**
Cybersecurity: Development of an Undetectable RAT and Windows Firewall Bypass
- Designed and implemented a Remote Access Trojan (RAT) capable of reverse TCP communication using Metasploit and C#, while bypassing Windows Defender and basic firewalls.
- Explored various payload delivery methods, including phishing emails and malicious web pages, to inject the RAT.
- Collaborated with a team working on security logging using the ELK Stack to analyze and mitigate potential threats.
- Gained insights into Windows system vulnerabilities, firewall configurations, and advanced persistence techniques for malware.

ADDITIONAL INFORMATION
- Technical Skills: Experienced in GraphQL, Kubernetes Operators, CI/CD Automation, Prometheus Monitoring, TDD, SDN, Nginx configuration, VPS management, Iptables, Virtual Networks. Intermediate knowledge in Smart Contracts (Solidity, Ethereum). Proficient in Linux.
- Fluent in English and French

Jules Royet

INGÉNIEUR

PROFIL

Étudiant ingénieur en informatique et réseaux, travaillant pour la plus grande entreprise de télécommunications française, avec un fort intérêt pour la cybersécurité appliquée aux applications et aux réseaux.

CONTACT

✉ jules.royet.pc@gmail.com

📞 +33 6 73 44 08 83

🚗 Permis B

INTÉRÊTS

SPORTS
Musculation, randonée, nage

TECHNOLOGIES
Nucléaire, hydrogen, automobile, hardware info, solutions SoC RootMe, HTB, TryHackMe, EDR

SCOLAIRE

2025 - Diplôme d'ingénieur en Informatique et Réseaux - ENSEIRB-MATMECA (Bordeaux, France)

2022 - Diplôme Universitaire de Technologie en Informatique - Université (Bayonne, France)

PROFESSIONNEL

2022 - 2025

Orange
Alternance
Bordeaux

INGÉNIEUR LOGICIEL
- Création et développement de **user stories** sur la boutique en ligne d'Orange.
- Mise en place de pipelines **Gitlab CI/CD**.
- Conteneurisation **Docker**.
- Build personnalisé d'application avec **gradle**, **maven**, **webpack**.
- Analyse statique et correction via **SonarQube**.
- **AppSec** avec les guides du CIS et de l'ANSSI.

2023

Market Control
Stage
Barcelone

INGÉNIEUR LOGICIEL
- Développement d'une plateforme web **NodeJS** utilisant le framework **OpenUI5**.
- Mise en place de **Github Actions**.
- Déploiement sur **Docker**.
- Déploiement sur **SAP BTP**.

APTITUDES

LANGUES
Français : natif
Anglais : C1 (TOEIC)
Espagnol : B2

INFORMATIQUE
C, C++, Bash, Python, JS, TS, PHP, Java, Kotlin, Go, R
Spring, Micronaut, Express, Vue, Svelte, React, Symfony

SAVOIR-FAIRE
Agile : Scrum, Kanban, Jira
Design patterns SOLID

RÉSEAUX
Routing, IP, IPv4, IPv6, DHCP, TLS, DNS, VPN, Firewall, ESXi, Kerberos, AD, Hyper-V