# Julien Soulé

+33 6 77 63 12 13 35 Rue Mathieu de la Drôme, 26000 Valence

1st year PhD student working in Multi-Agent Systems for Cyberdefense.







#### PROFESSIONAL EXPERIENCE

# Thales (La Ruche), Rennes — Research Engineer

DEC 2021 - JUN 2022

• Study on multi-agent aspects and integration within "La Ruche" context in order to explore modeling cyber environments and anomaly detections.

## **Atos, Toulouse** — Software Engineer

AUG 2020 - SEP 2021

• Continuation of ISIS project developments with more interactions with the CNES.

#### **Atos, Toulouse** — Software Engineer Internship

JAN 2020 - JUL 2020

- Worked on development of the ISIS project for the CNES (Centre National d'Etude Spatial).
- Product line to handle launching and monitoring of new satellites from Control and Command centers.
- Tools: Python / Bash, KVM, Grafana, Django...

#### **SQLI, Toulouse** — Mid Software Engineer Internship

MAY 2019 - JUL 2019

• Airbus Helicopter projects within different aspects: security, maintenance, development...

#### ADDITIONAL EXPERIENCES

#### BattleCode (Sopra Steria), Rennes

Meet several coding challenges in teams MAR 2017

#### **EDUCATION**

#### Institute of Engineering Univ. Grenoble Alpes

PhD - "On Organization of a Cyberdefence Multi-Agent System (AICA)" JUL 2022 - PRESENT

• Keywords: Multi-Agent Systems, Cyberdefense, Multi-Agent Reinforcement Learning, Software Architecture...

#### Ecole de Technologie Supérieur, Montréal (Canada)

One study semester in Computer Engineering JAN 2019 - MAY 2019

Institut National des Sciences Appliquées (INSA), Rennes

Master's degree in Computer Engineering

2015 - 2020

## **PROJECTS**

# Multi Cyber Agent Simulator (MCAS) — Methodological tools for PhD

DEC 2022

Created a Proof-Of-Concept project aiming to simulate (and emulate) cyber-defender and cyber-attacker agents "fighting" in host nodes in a network. Main interest is to reproduce real known attacks in a realistic way and learn from the assessment of several cyberdefense multi-agent system organizations against these.

Tools: Flask, Angular, PettingZoo, CybORG, HTML/CSS...

#### **PUBLICATIONS**

#### **National Conferences**

- Soulé, J., Jamont, J.-P., Occello, M., Théron, P., & Traonouez, L.-M. De l'Organisation des Systèmes Multi-Agents de Cyberdefense. RESSI 2023.
- Soulé, J., Jamont, J.-P., Occello, M., Théron, P., & Traonouez, L.-M. De l'Organisation des Systèmes Multi-Agents de Cyberdefense. RJCIA 2023.
- Soulé, J., Jamont, J.-P., Occello, M., Théron, P., & Traonouez, L.-M. De l'Organisation des Systèmes Multi-Agents de Cyberdefense. JFSMA 2023.

#### **International Conferences**

 Soulé, J., Jamont, J.-P., Occello, M., Théron, P., & Traonouez, L.-M. Towards a Multi-Agent Simulation of Cyber-attackers and Cyber-defenders Battles. IEEE SMC 2023.

#### **RESPONSIBILITIES**

# Treasurer of the Autonomous Intelligent Cyberdefence Agent International Work Group (AICA IWG)

MAY 2023 - PRESENT

#### **PRESENTATIONS**

# Talk for the CybAIR NATO Chair. École de l'air et de l'espace

MAR 2023

Presentation of my PhD topic and discussions

#### TEACHING EXPERIENCES

# **Teaching Assistant, Valence**

JAN 2023 - MAR 2023

· Basics of system administration

#### **SKILLS**

#### **French**

Native

#### **English**

• Professional (910 TOEIC)