68% **Extravert**
63% **Intuitive**
60% **Turbulent**

85% **Organized**
76% **Rational**

16Personalities

BELBIN®

Coordinator

CHAVEROUX Pierre
Engineering Student
ENSEEIHT - Master 1 – SN

Key Numbers :
Bioinformatic market valued **USD 10.1 billion** (2022)
→ CAGR of **~13.7%** through 2030

PLAN B – BIOINFORMATICS

Reorientation from a **Biology DUT** :
→ **Bridges** between Biology and IoT

UCA UNIVERSITÉ Clermont Auvergne

Topics of interest :
- Integration of **IoT-based biosensors**
- **AI-based** prediction **models**
- **Useful** applications **for society**

Next steps :
- **Machine Learning** for biological data
- Biosensors **signal processing**
- Advanced **modeling** systems

Key Numbers :
40K space **objects** in Earth **orbit**
Estimated population of orbital debris ~1.2 million [7]

PLAN A – IoT CYBERSECURITY

Alsatis – Apprenticeship evolution :
- **IoT Pentesting** and Security
- **Automation** & Edge Computing
- Work with **LoRaWAN** 1.0.4 / 1.1

Topics of interest :
- **Hardware** and network **security**
- **Zero-trust** architectures
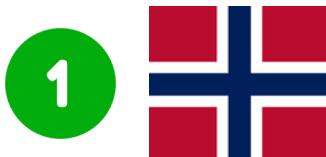- Post-quantum **cryptography**

WOCSA

Next steps :
- Cyber **crisis management**
- IoT & **network pentesting**
- **Incident response** automation

PLAN C – SPACE ENGINEERING

Integrate the **space sector** in :
- Atmospheric **re-entry** technologies
- **Orbital debris** mitigation
- Space **sustainability**

cnes CENTRE NATIONAL D'ÉTUDES SPATIALES

Topics of interest :
- **Debris avoidance** mechanisms
- Embedded **propulsion systems**
- **End-Of-Life procedures** for satellites

Next steps :
- Real-time and **avionics systems**
- **IoT** in **extreme conditions**
- Flight dynamics

International mobility plans :

1. 🇳🇴 **Norwegian University of Science and Technology**
2. 🇸🇪 **Luleå University of Technology**
3. 🇪🇸 **Polytechnic University of Madrid**

Key Numbers :
18.5 billion IoT devices
→ **40.6 billion by 2034**

At Alsatis, I am involved in all stages of the study and deployment of LoRaWAN networks and their associated sensor infrastructures.