



A word cloud of blockchain and Web3 concepts. The words are arranged in a roughly circular pattern, with 'redchainlab' and 'iexec' being the largest. Other prominent words include 'decentralization', 'interoperability', 'security', 'scalability', 'data-provisioning', 'oracles', 'cloud-computing', 'standardization', 'events', 'collusion-resistance', and 'blockchain-trilemma'. The colors range from dark green to light green.

data-provisioning  
iexec scalability  
oracles redchainlab  
security cloud-computing  
standardization  
decentralization  
blockchain-trilemma events  
collusion-resistance interoperability

# About me

## Matthieu BETTINGER

- INSA-IF 2021
- Double-degree with Uni. Passau

### 2021 projects:

- “*Collusion-Resistant Worker Set Selection for Transparent and Verifiable Blockchain-Based Voting*” with Lucas Barbero & Omar Hasan
- “*Blockchain interoperability – Cross-chain oracles with Decentralized Cloud Computing*” with iExec, INSA Lyon & Uni.Passau

### 2022–2024:

- PhD thesis on “*Blockchain interoperability & composability*” in RedChainLab

# Summary

- iExec Decentralized Cloud Computing
- Using blockchains to secure applicative protocols
  - *“Collusion-resistant worker set selection”*
- RedChainLab
- Oracles: Connecting blockchains & the outside world
  - Theory & Practice
  - Standardization & Interoperability
  - Data provisioning trade-offs
  - *“Oracles with Decentralized Cloud Computing”*
- Project/Practical work

# Goals

- Real-world applications of blockchain/smart contract technology, how they secure protocols
- Trustworthy data provisioning issues and countermeasures
- Event-based programming with Solidity/Web3J(S)