



MUKAM Augusta Priscille

 (+33) 773121898

 **Bordeaux, France**
Research Engineer / Postdoc
— open to relocation and
international opportunities

Research Engineer – Distributed Systems & Cloud | PhD (University of Bordeaux, 2026)

 mukamaugusta5@gmail.com

 github.com/djadar/

 [linkedin.com/in/augusta-mukam-06525b147](https://www.linkedin.com/in/augusta-mukam-06525b147)

 research.amukam.com/

Main Skills

Operating systems

Linux: Ubuntu, Kali Linux,
Windows

Programming

Rust, R, Go, C, Python, C++, Java,
Js, HTML, CSS, Django, MATLAB

Editing

Latex, Microsoft office tools,
Google suite

Cloud & Systems Infrastructure

Grid5000, Ansible, Docker,
Kubernetes, Terraform
MySQL, MariaDB, MongoDB,
Cassandra, Kafka
AWS, GCP, Azure

Modeling and Management

DevOps, Agile, Scrum, Jira, Slack

Soft Skills

Cross-disciplinary technical
profile · Scientific writing &
communication · Analysis &
synthesis

Communication, Proactivity,
Discipline, Adaptability, Focus.

Education

2022–2026: University of Bordeaux, France

PhD in Distributed Systems —
Thesis: “Byzantine-Resilient Peer
Sampling for Large-Scale

Summary

PhD in Distributed Systems (University of Bordeaux, April 2026). Research expertise in Byzantine fault-tolerant gossip protocols, scalable peer sampling, and memory-efficient distributed algorithms for blockchain and large-scale P2P systems. Strong practical background in systems programming (Rust, Go, C), cloud infrastructure (AWS, GCP, Azure, Kubernetes, Docker), and large-scale distributed experimentation (Grid5000, Ansible). Targeting Research Engineer or Postdoc positions in distributed systems, cloud computing, or adjacent fields (ML infrastructure, networked systems, applied security).

Work Experience

Fellow Teaching and Research Associate University of Bordeaux, France

01/26 - 08/26

168 hours

L3 : Compilation, L2 : Algorithms for Tree Data Structures, M1 : Programming Project

PhD researcher

10/22 - 04/26

Progress team, LaBRI at University of Bordeaux,
France

Designed and evaluated Byzantine fault-tolerant gossip protocols for peer sampling in large-scale distributed systems and blockchain networks. Key results: up to 60% improvement in fault tolerance (robust with 40% adversarial nodes); scalable hash-based frequency estimation with minimal memory overhead.

Supervisors: [Laurent Réveillère](#), [Joachim Bruneau-Queyreix](#).

AUPE: Collaborative Byzantine fault-tolerant peer-sampling at

The 22nd International Symposium on Network Computing and Applications (NCA) 2024 (Acceptance rate: 33%) - **Best Paper Award**

R&D Intern

02/22 - 08/22

Digital Power team, **Schneider Electric, Grenoble, France**

- Secure storage in Am65xx devices
- TrustZone with OpTEE, Linux filesystem-based Secure Storage
- Secure application written for SHA256, AES 128 CBC, RSA, ECDSA calculations and TLS connections based on OpenSSL and Trusted Platform Module (TPM) .

Supervisors: [Julien Michel](#), [Milan Stevanovic](#)

Achievements: Enabled Secure boot on Am65xx HS Schneider devices

Distributed Systems”

Defended: **April 2026**
Gossip-based peer sampling · Byzantine fault tolerance · Scalable frequency estimation · Blockchain security

2021-2022: Grenoble Inp - Ensimag - France

Master of Science in Informatics at Grenoble (MoSiG) in Cloud and Distributed Systems

LabEx MILYON Scholarship of excellence
Large scale Data-Management and Distributed systems, Cloud computing, Advanced parallel system, Advanced networking

2016-2021: National Advanced School of Engineering of Yaounde (ENSPY) - Cameroun

Master of Engineering in Computer Science
Software engineering and programming, Algorithms, security, Operation research and graph, Machine Learning and Data Mining, Management

Research Interests

Distributed systems · Byzantine fault tolerance · Cloud infrastructure · Systems programming · ML infrastructure · Applied security · Networked systems

Languages

French	Fluent
English	Fluent
Spanish	Beginner

Hobbies

Fitness, Singing, Travelling, Reading, Learning

Research Intern

LIP laboratory, ENS Lyon, France

03/21 - 09/21

- Study of Intel SubPage Write Protection (SPP) Intel specification
- Implemented SPP handling functions in the XEN hypervisor
- Bytecode analyzer based on the LLVM compiler
- A study of vulnerabilities over the last 12 years.

Supervisors: [Alain Tchana](#), [Stella Bitchebe](#)

Achievements: SPP-based memory protection policies against buffer overflows

Latest Publications & Talks

[1] A. Mukam et al., “Robust frequency estimation for peer sampling in adversarial context,”

2026, under publication

[2] A. Mukam et al., “AUPE: Collaborative Byzantine Fault-Tolerant Peer-Sampling,” NCA 2024 – 22nd IEEE Int. Symp. on Network Computing and Applications, Bertinoro, Italy. Acceptance rate: 33% · 🏆 Best Paper Award

Certifications

Kubernetes Fundamentals (LFS258) for Certified Kubernetes Administrator (CKA)

The Linux Foundation (ongoing)

Introduction to Cloud Infrastructure Technologies LFS151

[The Linux Foundation](#)

DevOps Basics for Everyone IBM CD0115EN

[edX](#)

Introduction à la programmation orientée objet (en Java)

[Coursera](#)

Score : 93.40%

Teaching & Service

Bordeaux INP - Enseirb Matmecca, Telecom, Bordeaux, France

2023-2025

Teaching assistant (50 hours*2) and Internship tutoring (M1 and M2 internships)

L3: Imperative Programming, Introduction to Operating Systems

M1: Network Programming

L1 Student mentoring, University of Bordeaux, France

2023

Mathilde Chollon - 2 months - Topic: Large scale experiments in G5K

Popularising research

2023-2024

Introduced the research profession to a group of 4 high school students, and to a group of 3 L3 students from University of Bordeaux