

Curriculum Vitæ

Anne Josiane KOUAM DJUIGNE

2nd Year PhD Student

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INRIA Saclay, TriBe Team

Research Interests: Mobile networks, Data analytics, Fraud detection, SIMBox fraud

(a) Education & Training

Doctoral Degree

Ecole Polytechnique, France - INRIA Saclay

Nov 2019 - now

Title: Detection of bypass frauds in cellular network datasets

Goal: To detect SIMBox bypass frauds by leveraging human behavior modeling in terms of communication and mobility

Originality: Despite the work published on it and the large number of private companies that offer detection solutions, this is still an open issue. This is mainly due to the fact that SIMboxes are evolving in functionality to simulate more and more human behaviour.

Supervised by: Aline Viana (CRN INRIA) & Prof. Alain Tchana

Master degree in computer Science

National Advanced School of Engineering, Cameroon

Sep 2014 - Sep 2019

Valedictorian, Graduated with appreciation Excellent

Scientific A.Level

G. Bilingual High School of Mendong, Cameroon

Aug 2014

Graduated with honor

(b) Research & Professional Experience

Mar 2019 – Sep 2019 Research Internship, **IRIT** Toulouse and **I3S** Nice

Implementation of an in-memory storage solution for Function as a Service(FaaS)

We proposed an in-memory storage system designed and adapted to FaaS platforms, to address their latency issue. Our solution was based on the use of available resources in functions' execution nodes. We implemented a proof of concept using the RAMCloud storage system, and the FaaS Apache OpenWhisk platform. It showed a significant potential to reduce FaaS execution latency.

Advisors : Prof Alain Tchana & Assoc. Prof Renaud Lachaize

Jul 2018 – Sep 2018 Trainee Internship, **CIRT** (Computer Incident Response Team) Cameroon

Implementation of a framework for mobile subscribers' relations analysis

The main objective was to analyze social relations between mobile subscribers from CDRs (Call Data Records) traces. This was intended to help identify clusters as well as individuals from their relationships to recognize and track fraudulent individuals. We designed some social patterns that we implemented for this purpose.

Advisors : Prosper Pagou (Software Eng.) & Wanki Mukong (Software Eng.)

Jul 2015 – Aug 2016 Polytech Valor **CIMI** program member, NASE Cameroon

The CIMI (Interface Center with the Industrial World) program is a resolutely action-oriented training program of the **National Advanced School of Engineering**, whose objective is to make trainees more efficient and ready for the industrial world. Numerous training courses are given, notably in terms of speed reading, concentration, rapid typing, memorization, verification, etc. Students are also assigned real companies' projects and tasks to prepare for the industrial world, and have the opportunity to give training to high school students.

(c) Teaching Experience

■ Distributed Systems and virtualization, NASE, Cameroon

Assistant of Prof Alain Tchana

I designed and presented the Distributed Systems and Virtualization school project for the L3 2019/2020 and supervised the students during its realization.

(d) Publications

Under review

1. **A. J. Kouam D.**, A. Carneiro Viana and A. Tchana, "SIMBox bypass frauds in cellular networks: Strategies, evolution, and detection survey," in IEEE Communications Surveys & Tutorials 2019.
2. Djob Mvondo, Mathieu Bacou, Kevin Nguetchouang, Lucien Ngale, Stephane Pouget, **Josiane Kouam**, Renaud Lachaize, Jinho Hwang, Tim Wood, Daniel Hagimont, Noel De Palma, Batchakui bernabé, Alain Tchana. FaaS-cache: an opportunistic free caching system for FaaS platforms. EuroSys 2021.

(e) Certifications

May 2018	Comprendre la 4G	by IMT on Fun-mooc	certificate link
Dec 2020	Recherche reproductible: principes méthodologiques pour une science transparente	by INRIA on FUN-mooc	certificate link

(f) Synergistic Activities

1. Co-organizer of the **JOURNÉES RETOUR D'EXPÉRIENCE 2020** at Polytechnique Yaoundé, Cameroon. [Website of the event](#).

(g) Interests

Reproducible research, New generation mobile networks (5G & beyond)
Distributed Systems, Human Behavior
Reading, Cooking