# STELLA BITCHEBE

3<sup>rd</sup> Year Ph.D. Student in Systems and Architecture

Cameroonian

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# **Education**

Since March	PhD Student
2019	Theme: Hardware enhancements for virtualization
	Supervisor: Pr. Alain Tchana
	Laboratory i3S, Côte d'Azur University, Nice, France
	Laboratory LIP, ENS Lyon, Lyon, France
2015 - 2018	Diploma of Engineering in Computer Science
	National Advanced Polytechnic School of Engineering of Yaounde (ENSPY), Cameroon
	Valedictorian of the graduating promotion
2012 - 2015	Two Year University Degree in Mathematics (DEUG)
	Faculty of Sciences, University of Yaounde 1, Cameroon
2012 - 2014	Senior Statistics Technician
	Sub-Regional Institute of Statistics and Applied Economics (ISSEA), Cameroon
	Vice Valedictorian of the graduating promotion
2011 - 2012	Classes Préparatoires aux Grandes Ecoles
	ENS Yaounde, Cameroon
	Best student of Class
2011	Baccalaureate
	General Leclerc High School (LGL), Yaounde - Cameroon
	Best student of the high school promotion

# **Work Experience**

# Teaching

January - June 2020 L3 Assistant Teacher at ENS Lyon

(6 months) Ecole Normale Supérieure de Lyon (ENS), Lyon - France

TP in L3, department of computer science: conception and

implementation of Practical Works, student monitoring.

September – October L3 Assistant Teacher at Polytechnic Yaounde

2018 National Advanced Polytechnic School of Engineering of Yaounde

(2 months) (ENSPY), Yaounde - Cameroon

Course on virtualization in L3, department of computer engineering: class preparation, exam preparation and paper correction, student

monitoring.

### Research & SW Development

March - August 2018 Research Internship at IRIT

(6 months) Institut de Recherche en Informatique de Toulouse (IRIT) &

Laboratoire de Recherche en Informatique de Bordeaux (LaBRI),

France

Supervisors: Pr. Alain Tchana & Pr. Laurent Réveillère

Working Set Size estimation technique based on PML (Page

Modification Logging)

July – August 2017 Internship at AAG

(2 months) Ashdown Advisory Group, Yaounde - Cameroon

Development of a Business Intelligence module for the AAG's ERP

(Enterprise Ressource Planning) X-Manager

November – December Internship at MINESUP

2014 Ministère de l'Enseignement Supérieur, Yaounde - Cameroon

(2 months) Realization of the statistical yearbook of the Ministry of Higher

Education

February – May 2014 Internship at MINESUP

(4 months) Ministère de l'Enseignement Supérieur, Yaounde - Cameroon

Design and implementation of a unified database application for

national universities of Cameroon

September 2013 Internship at MINESUP

(1 month) Ministère de l'Enseignement Supérieur, Yaounde - Cameroon

Analysis of statistical data of higher education in 2011 in Cameroon

#### **Publications**

International Conferences papers

**Extending Intel PML for Hardware-Assisted Working Set Size Estimation of VMs** 

Stella Bitchebe, Djob Mvondo, Alain Tchana, Laurent Réveillère, Noel De Palma

Proceedings of the 17th ACM SIGPLAN/SIGOPS International Conference on Virtual Execution Environments, VEE 2021 (A Rank)

#### **Everything You Should Know About Intel SGX Performance on Virtualized Systems**

Tu Dinh Ngoc, Bao Bui, **Stella Bitchebe**, Alain Tchana, Valerio Schiavoni, Pascal Felber, Daniel Hagimont

Proceedings of the ACM on Measurement and Analysis of Computing Systems, Sigmetrics 2019 (A\* Rank)

> International Workshops papers

### **Study Of Intel PML Effectiveness**

Stella Bitchebe, Alain Tchana, Laurent Réveillère 13th EuroSys Doctoral Workshop, Eurosys 2019 (A Rank)

National Conferences papers

#### **Hardware Assisted Virtual Machine Page Tracking**

Stella Bitchebe, Djob Mvondo, Alain Tchana, Laurent Réveillère, Noel De Palma National Conference in Parallelism, Architecture and System (Compas) 2019

#### **Posters**

### **Hardware Assisted Virtual Machine Page Tracking**

Stella Bitchebe, Alain Tchana, Laurent Réveillère National Conference in Parallelism, Architecture and System (Compas) 2019

#### **Study Of Intel PML Effectiveness**

Stella Bitchebe, Djob Mvondo, Alain Tchana, Laurent Réveillère, Noel De Palma 13th EuroSys Doctoral Workshop (EuroDW 2019)

#### Technique D'Estimation Du Working Set Basee Sur Le Page Modification Logging (PML)

Stella Bitchebe, Alain Tchana, Laurent Réveillère

National Conference in Parallelism, Architecture and System (Compas) 2018

#### **Talks**

Talk to high school girls during the event "La science un métier de femmes"

ENS Lyon, France, March 2020

Hardware Assisted Virtual Machine Page Tracking: Compas 2019

Anglet, France, July 2019

Study Of Intel PML Effectiveness: EuroSys Doctoral Workshop (EuroDW 2019)

Dresden, Germany, March 2019

Hardware Features for Virtualization - GDR and ASF Winter School on Distributed Systems and Network

Village of Pleynet - Sept Laux, France, February 2019

Speech to the student of the Computer Engineering Department about my carreer: Polytechnic Yaounde (ENSPY)

Yaounde, Cameroon, September 2018

## **Services rendered to the Community**

Sub-Reviewer at Compas'21

Main Reviewer: Alain Tchana

Student Volunteer at "Journées Cloud 2020": conception of the event website

ENS Lyon, November 2020

Sub-Reviewer at CRI'19 Conference

Main Reviewer : Alain Tchana Student Volunteer at Compas 2018

IRIT, July 2018

### Responsabilities

### > Intern Supervision

**Augusta Mukam**, M2 Student at National Advanced Polytechnic School of Engineering of Yaounde - Department of Computer Science, *Since February 2021* 

Topic: Security policies related to the use of Intel SPP at the user-space level

**Yves Kone,** M2 Student at Sorbonne University of Paris - Department of Distributed Systems and Applications, *March - August 2020* 

Topic: Applying Intel Sub-Page Permission to Memory Security

**Gaspard Thevenon,** L3 Student at ENS of Lyon - Department of Computer Science, *July - August 2020* Topic: Everyone should benefit from Hardware Assisted Virtualization, not only the Hypvervisor

#### Other Responsabilities

Member of the laboratory council, LIP laboratory, ENS Lyon

Member of the parity working group at LIP laboratory, ENS Lyon

Participation in the organization of the day: "La science : un métier de femmes"

### **Mobility and Collaborations**

Since November ENS Lyon

2019 Laboratory LIP, Team AVALON, Lyon, France

January - October Université Côte d'Azur

2019 Laboratory i3S, Team SCALE, Sophia Antipolis, France

Mars - August Univeristé de Toulouse

2018 Laboratory IRIT, Team SEPIA, Toulouse, France

#### **Awards and Distinctions**

Winner of the "Concours Inria d'idées innovantes 2021" (With my Ph.D. advisor)

NEC Ph.D. fellowship grants 2021 (49k €)

ASPLOS Grants 2020

SRDS Grants 2019

Eurosys Grants 2019

Valedictorian of my graduating promotion ENSPY 2018

Laureate at the project "Huawei Seed For The Future" 2017

Major of the Entrance Competition at Polytechnic School of Yaounde (2015)

Award of the Best Student of the seven-year period at General Leclerc High School of Yaounde (2012)

Award of Scientific Excellence at General Leclerc High School (2011)

Award of the First Prize at the National Competition (dissertation on the importance of water) organized by the Ministry of Water and Energy in Cameroon (2011)

### **Personal Traits**

Great adaptability and easy integration (mobility Yaounde - Toulouse - Nice - Lyon)

Great capacity for assimilation

Ability to work simultaneously on multiple projects and under pressure

## **Programming and Languages Skills**

Programming C, C++, Python, Shell, Objective-C, Assembly Languages French: native language, English: Intermediate

# **Personal Interests**

I like cooking (specially decorate all the dishes I make and take a photo of them before tasting them)
I also like singing (I use to record myself covering some known songs and post them on social medias)
I also appreciate doing sport and a little bit cycling around