
STELLA BITCHEBE

3rd Year Ph.D. Student in Systems and Architecture

Cameroonian

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Education

Since March 2019	PhD Student 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 (6 months)	L3 Assistant Teacher at ENS Lyon Ecole Normale Supérieure de Lyon (ENS), Lyon - France TP in L3, department of computer science: conception and
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implementation of Practical Works, student monitoring.

**September – October
2018
(2 months)**

L3 Assistant Teacher at Polytechnic Yaounde

National Advanced Polytechnic School of Engineering of Yaounde (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
(6 months)**

Research Internship at IRIT

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
(2 months)**

Internship at AAG

Ashdown Advisory Group, Yaounde - Cameroon

Development of a Business Intelligence module for the AAG's ERP (Enterprise Resource Planning) X-Manager

**November – December
2014
(2 months)**

Internship at MINESUP

Ministère de l'Enseignement Supérieur, Yaounde - Cameroon

Realization of the statistical yearbook of the Ministry of Higher Education

**February – May 2014
(4 months)**

Internship at MINESUP

Ministère de l'Enseignement Supérieur, Yaounde - Cameroon

Design and implementation of a unified database application for national universities of Cameroon

**September 2013
(1 month)**

Internship at MINESUP

Ministère de l'Enseignement Supérieur, Yaounde - Cameroon

Analysis of statistical data of higher education in 2011 in Cameroon

Interns Co-supervision

Since February 2021

Augusta Mukam

M2 Student at National Advanced Polytechnic School of Engineering of Yaounde - Department of Computer Science

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

March – August 2020
(6 months)

Yves Kone

M2 Student at Sorbonne University of Paris - Department of Distributed Systems and Applications

Topic: Applying Intel Sub-Page Permission to Memory Security

July – August 2020
(2 months)

Gaspard Thevenon

L3 Student at ENS of Lyon - Department of Computer Science

Topic: Everyone should benefit from Hardware Assisted Virtualization, not only the Hypervisor

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

Presentation of the my project to the NEC team, during our first fellowship meeting (visio conference)

Lyon, France, July 2021

Presentation of my work to Natacha Crooks during visit to our team at the invitation of Pr Alain Tchana for a talk on her work

ENS Lyon, France, July 2021

Presentation of my work during the “Séminaire CVS: Cloud, Virtualisation, Système” co-organized with Pr Alain Tchana and Pr Jalil Boukhobza teams

ENSTA-BRETAGNE Brest, France, June 2021

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 Pleyne - Sept Laux, France, February 2019

Speech to the student of the Computer Engineering Department about my career: 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

Administrative Responsibilities

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 2019	ENS Lyon Laboratory LIP, Team AVALON, Lyon, France
January - October 2019	Université Côte d’Azur Laboratory i3S, Team SCALE, Sophia Antipolis, France
Mars - August 2018	Univeristé de Toulouse Laboratory IRIT, Team SEPIA, Toulouse, France

Awards and Distinctions

OSDI Grants 2021

ACM SIGMETRICS Grants 2021

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