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# Stella Bitchebe

3<sup>rd</sup> Year Ph.D. Student in  
Computer Science (Systems  
and Architecture)

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Nationality: Cameroonian



## Education

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

## Publications

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### ➤ Pending Submissions

**Stella Bitchebe & Alain Tchana**

49th IEEE/ACM International Symposium on Computer Architecture, ISCA '22 (A\* Rank)

### ➤ 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)

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### 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*

### Buffer overflows

*Yves KONE, **Stella Bitchebe**, Alain Tchana, Pierre Olivier*

Journées Cloud 2020

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

*Thévenon Gaspard, **Stella Bitchebe**, Alain Tchana, Vo Quoc Bao Bui*

Journées Cloud 2020

### 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

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### 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 Basée Sur Le Page Modification Logging (PML)

***Stella Bitchebe**, Alain Tchana, Laurent Réveillère*

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

## Talks

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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*

Processing of oral defenses of DS4H tutored projects

*Univeristé Côte d'Azur, France, April 2020*

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Invited speaker 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*

## Work Experience

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### 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 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**

Ministry of Higher Education, Yaounde - Cameroon

Realization of the statistical yearbook of the Ministry of Higher Education

February – May 2014

(4 months)

#### **Internship at MINESUP**

Ministry of Higher Education, Yaounde - Cameroon

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

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## Interns Co-supervision

March - September 2021 (7 months)	<b>Augusta Mukam</b> M2 Student at National Advanced Polytechnic School of Engineering of Yaounde - Department of Computer Science <u>Topic</u> : Security policies related to the use of Intel SPP at the user-space level
March – August 2020 (6 months)	<b>Yves Kone</b> M2 Student at Sorbonne University of Paris - Department of Distributed Systems and Applications <u>Topic</u> : Applying Intel Sub-Page Permission to Memory Security
July – August 2020 (2 months)	<b>Gaspard Thevenon</b> L3 Student at ENS of Lyon - Department of Computer Science <u>Topic</u> : Everyone should benefit from Hardware Assisted Virtualization, not only the Hypervisor

## Services rendered to the Community

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“Mid-Career AMA” Session moderator at SOSP Diversity Workshop 2021

*Online event, October 2021*

Sub-Reviewer at FCGS Journal 2021

*Main Reviewer : Alain Tchana*

Sub-Reviewer at CRI’21 Conference

*Main Reviewer : Alain Tchana*

Sub-Reviewer at Compas 2021

*Main Reviewer : Alain Tchana*

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

*ENS Lyon, November 2020*

Moodle Platform developed for UNESCO during the 2020’s lock down

I was assigned the task of customizing/designing the platform according to the graphic charter of UNESCO.

The aim was to provide a platform where teachers could offer thousands of free courses to students (who were then locked down during the COVID’19 pandemic).

The project was held in collaboration with Professor Alain Tchana, Dr Djob Mvondo and other engineers.

Organization of the day “La science : un métier de femmes”

*ENS Lyon, Mars 2020*

Sub-Reviewer at CRI’19 Conference

*Main Reviewer : Alain Tchana*

Student Volunteer at Compas 2018

*IRIT, July 2018*

## Administrative Responsibilities

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Member of the laboratory council (Ph.D. Students Representative), LIP laboratory, ENS Lyon

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

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

## Awards and Honors

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Laureate of the “**Microsoft Research PhD Fellowship**” program 2021 (15k \$)  
Laureate of the program “**L’Oréal-UNESCO For Women in Science**” 2021 (15k €)  
Winner of the “**Concours Inria d’idées innovantes 2021**” (With my Ph.D. advisor)  
Laureate of the “**NEC Student Research fellowship**” program 2021 (49k €)  
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)  
Best Student of the seven-year period at General Leclerc High School of Yaounde (2012)  
Award for Scientific Excellence at General Leclerc High School (2011)  
First Prize at the National Competition (dissertation on the importance of water) organized by the Ministry of Water and Energy in Cameroon (2011)

## Grants

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OSDI Grants 2021  
ACM SIGMETRICS Grants 2021  
ASPLOS Grants 2020  
SRDS Grants 2019  
Eurosyst Grants 2019

## Programming and Languages Skills

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

## Mobility

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

## Personal Traits

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Great adaptability and easy integration (mobility Yaounde - Toulouse - Nice - Lyon)  
Great capacity for assimilation  
Leadership  
Ability to work simultaneously on multiple projects and under pressure

## Personal Interests

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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

## Transversal Training

How to deal with sexist remarks

*Caroline De Haas, Campus de Cely, France, October 2021*

Learn how to negociate and build relationships

*Aurelien Colson, Campus de Cely, France, October 2021*

Personal development and team management

*Sabine Henrichfreise & Olivier Basso, Campus de Cely, France, October 2021*

Media Training

*EuroBusiness Media (Tatiana Haen), Online, France, July 2021*

Être lu : comment assurer la circulation de sa publication sur le web?

*Université Côte d'Azur, France, October 2020*

## Medias

Event	Link
Articles in the <b>regional newspapers</b> of Nice, Lyon and Villeurbanne about the award “Young Talents France 2021 L’Oreal-UNESCO Dor Women In Science”	<a href="#"><u>CNRS</u></a>
	<a href="#"><u>Tribune de Lyon</u></a>
	<a href="#"><u>Le Progrès Lyon</u></a>
	<a href="#"><u>HER magazine</u></a>
	<a href="#"><u>ENS Lyon</u></a>
	<a href="#"><u>Radio Scoop Lyon</u></a>
	<a href="#"><u>Lyon Entreprises</u></a>
	<a href="#"><u>Info-Flash Rhone-Alpes Villeurbanne</u></a>
	<a href="#"><u>ActuNice</u></a>
	<a href="#"><u>Tout Lyon</u></a>
	<a href="#"><u>Ville de Villeurbanne (Facebook)</u></a>
	<a href="#"><u>Viva Villeurbanne</u></a>
	<a href="#"><u>Impact FM Lyon</u></a>
Guest at the morning news at <b>BFM Lyon</b> October 8, 2021	<a href="#"><u>BFM - Part 1</u></a>
	<a href="#"><u>BFM - Part 2</u></a>
RFI interview during the “ <i>Semaine Scientifique de l'AUF</i> ” in Bucarest (Romania) September 23, 2021	<a href="#"><u>Facebook Interview</u></a>
	<a href="#"><u>Live Facebook</u></a>
	<a href="#"><u>Instagram Interview</u></a>
“Concours Inria d’Idées Innovantes”	<a href="#"><u>ENS Lyon</u></a>
	<a href="#"><u>LinkedIn</u></a>
Radio Interview with the <b>Cameroon National Television (CRTV)</b> - For the NEC PhD fellowship I received	<a href="#"><u>LinkedIn</u></a>
	<a href="#"><u>Youtube</u></a>
Video Interview with the <b>Cameroon</b>	

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**National Television (CRTV)** - For the celebration of International Women's Day  
March 8, 2021

[LinkedIn](#)  
[Youtube](#)

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