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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  
Age: 27



## 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 (Master Degree) 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 Valedictorian
2011	<b>Baccalaureate</b> General Leclerc High School (LGL), Yaounde - Cameroon Valedictorian

## Publications

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### ➤ 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) [[pdf](#)][[presentation](#)]

#### 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) [[pdf](#)]

➤ *International Workshops papers*

**Study Of Intel PML Effectiveness**

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

13th EuroSys Doctoral Workshop, Eurosys 2019 (A Rank) [[pdf](#)]

➤ *National Conferences papers*

**Buffer overflows**

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

Journées Cloud 2020 [[pdf](#)]

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

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

Journées Cloud 2020 [[pdf](#)]

**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 [[pdf](#)]

## 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**, Alain Tchana, Laurent Réveillère

13th EuroSys Doctoral Workshop, Eurosys 2019 (A Rank)

**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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Invited speaker the event “La science un métier de femmes”

ENS Lyon, France, March 2022

Guest speaker for a conference on the theme “Can the digital future be more virtuous and sustainable?”

Bibliothèque Municipale de Lyon, Lyon, France, January 2022

Talk on my work and my project against the harassment of young girls in the academic environment to the Minister for the Promotion of Women of Cameroon

Ministry for the Promotion of Women and the Family, December 2021

Talk on my work and my project against the harassment of young girls in the academic environment to the Minister of Youth of Cameroon

Ministry of Youth, December 2021

Presentation of the my research 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*

“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*

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 Pleyneet - 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 2022  
(6 months)

#### **L3 Assistant Teacher at ENS Lyon, 28h**

Ecole Normale Supérieure de Lyon (ENS), Lyon - France  
TP on architecture, systems and network,, department of computer science: conception and implementation of Practical Works, student monitoring.

January - June 2020  
(6 months)

#### **L3 Assistant Teacher at ENS Lyon, 28h**

Ecole Normale Supérieure de Lyon (ENS), Lyon - France  
TP on architecture, systems and network, department of computer science: conception and implementation of Practical Works, student monitoring.

September – October 2018  
(2 months)

#### **L3 Assistant Teacher at Polytechnic Yaounde, 8h**

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)	<b>Internship at AAG</b> Ashdown Advisory Group Yaounde - Cameroon Development of a Business Intelligence module for the AAG's ERP (Enterprise Ressource Planning) X-Manager
November – December 2014 (2 months)	<b>Internship at MINESUP</b> Ministry of Higher Education Yaounde - Cameroon Realization of the statistical yearbook of the Ministry of Higher Education
February – May 2014 (4 months)	<b>Internship at MINESUP</b> Ministry of Higher Education Yaounde - Cameroon Design and implementation of a unified database application for national universities of Cameroon

## Student 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 Topic: Security policies related to the use of Intel SPP at the user-space level <b>Guest Rapporteur in her defense jury</b>
March – August 2020 (6 months)	<b>Yves Kone</b> 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)	<b>Gaspard Thevenon</b> L3 Student at ENS of Lyon - Department of Computer Science Topic: Everyone should benefit from Hardware Assisted Virtualization, not only the Hypervisor

## Service to the Scientific Community

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Organization of the day “La science : un métier de femmes”  
*ENS Lyon, Mars 2022*  
Sub-Reviewer at DSN 2022  
*Main Reviewer : Alain Tchana*  
“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

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

## Awards and Honors

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[Letter of congratulations](#) from the Minister for the Promotion of Women of Cameroon, for the Awards obtained in 2021 during my 3<sup>rd</sup> PhD year

Received in Ministerial Audience by the Minister for the Promotion of Women of Cameroon (MINPROFF)

Received in Ministerial Audience by the Minister of Youth of Cameroon (MINJEC)

Received in Ministerial Audience by the Minister of Posts and Telecommunications of Cameroon (MINPOSTEL)

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 (Final Selection Step)

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

Eurosys Grants 2019

## Programming and Languages Skills

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Programming C, Python, Shell, Assembly  
Languages French: native language (C2), English: Intermediate (B1)

## 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
March - 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

## Transversal Training

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How to deal with sexist remarks  
*Caroline De Haas, Campus de Cely, France, October 2021*  
Learn how to negotiate 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*

## Personal Interest

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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

## Organizations

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President of the association YCOWS (*Young Committed Women Scientists*)  
General Secretary of the association CCF (*Chercheurs Camerounais de France*)  
Mentor for the third edition of the "*Olympiades féminines de mathématiques*"  
Role Model for the association [Rêv'ELLES](#)

## Outreach

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Event	Link
Invited for a conference at the Municipal Library of Lyon	<a href="#"><u><b>BML</b></u></a>
Articles in the regional newspapers of Nice, Lyon and Villeurbanne related to the award “ <b>Young Talents France 2021 L’Oreal-UNESCO Dor Women In Science</b> ”	<a href="#"><u><b>CNRS</b></u></a> <a href="#"><u><b>Tribune de Lyon</b></u></a> <a href="#"><u><b>Le Progrès Lyon</b></u></a> <a href="#"><u><b>HER magazine</b></u></a> <a href="#"><u><b>ENS Lyon</b></u></a> <a href="#"><u>Radio Scoop Lyon</u></a> <a href="#"><u>Lyon Entreprises</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 of the morning news at <b>BFM Lyon</b> October 8, 2021	<a href="#"><u><b>BFM - Part 1</b></u></a> <a href="#"><u><b>BFM - Part 2</b></u></a>
<b>RFI</b> interview during the “Semaine de la Francophonie Scientifique” organized by the <b>AUF</b> in (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</b> (CRTV) - 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 National Television</b> (CRTV) - For the International Women Day	<a href="#"><u>LinkedIn</u></a> <a href="#"><u>Youtube</u></a>