






 Born in 7 April 1998, Ambohidratrimo, Antananarivo, Madagascar
 Logt 146 cité Akany Firaiana Antananarivo
 P.O BOX 608, Crystal Gardens, Limbe Cameroon
 anna.narivelomanana@aims-cameroon.org

 +237 692 365 026/+261 348 189 668
 [NanaSteff](#)
 [Anna Stefano Narivelomanana](#)
 annanarivelomanana07@gmail.com





Summary

I am a student in mathematics. I am very interested in maths generally based in the field of cryptography, algebra and number theory, and also in computing. Currently, I am doing my master's thesis on the stream cipher family of cryptography. I am self-taught in programming with Python 3, generally based on Gérard Swinnen's book, and am currently very passionate about computing technologies. I also have a strong interest in IT security. I am motivated, dynamic, serious, and creative, and I am a problem solver.

Education

- 2022 – 2023 **Structured Master, Fundamental Science Stream**
African Institute of Mathematical Science Cameroon.
- 2019 – 2020 **Master 1, in Mathematical Education**
Ecole Normale Supérieure, University of Antananarivo, Madagascar.
- 2016 – 2019 **Bachelor degree, in Mathematical Education**
Ecole Normale Supérieure, University of Antananarivo, Madagascar.
- 2014 – 2015 **Baccalaureate, série C**
Lycée Joseph Ravoahangy Andrianavalona Antananarivo, Madagascar.

Project and work

- Currently **Research on advanced stream cipher cryptography** **AIMS Cameroon**
Supervised by Prof. Giulio Codogni, University of Roma Tor Vergata.
- Currently **Berlekamp-Massey Algorithm**  **Personal project**
An implementation of the Berlekamp-Massey Algorithm written in Python3.
- 2023 **SPN Code**  **Personal project**
Encryption and decryption with Substitution Permutation Network written in Python3
- 2023 **RSA cryptosystem**  **Personal project**
A graphical interface for the RSA cryptosystem (encryption and decryption) made with Python3/Tkinter.
- 2022 **Olympic flag**  **Personal project**
It's a drawing of the Olympic flag on the python graphical interface Tkinter.

Experience

- Jan.-Feb. 2020 **Teaching internship mathematics** **Course of study**
CEG 67Ha Betsimitatatra.

Extra training

- June 2022 **Initiation to website development at Orange Digital Center Madagascar**
Html, CSS, MySQL, PHP.

Extra activities

- June 2022 **Member of a tree data collection team in a forest**
Mantadia Park, Andasibe, Madagascar
- May 2022 **Sharing session about algorithm and initiation to python programming**
Y-Tech club at YMCA Madagascar

Skills

Languages	English (high intermediate), French (advanced), German (low intermediate), Malagasy (native).
Coding	Python, R, \LaTeX , SageMath.
Framework and library	Pandas, Numpy, Scipy, Sympy.

Extracurricular and interest

- 2023** Leader of give-back team which mentors children in S.T.E.M. (Science, Technology, Engineering, and Mathematics), Save the Children Orphanage, Limbe, Cameroon.
- Clubs** Gender and library clubs at AIMS Cameroon.
- Feb.-Jun. 2022** Y-Tech club member at YMCA Madagascar
- Other** Singing, swimming, walking in the forest and exploring nature.

References

Dr. Giulio Codogni | Professor of Mathematics and Cryptography

Department of Mathematics

University of Rome Tor Vergata

Street of Scientific Research 1 00133 Rome, Italy

Home page : <https://sites.google.com/view/giuliodogni/home-page?authuser=0>

Email: codogni@mat.uniroma2.it

Dr. Andreas Buchleitner | Professor of Theoretical Physics

Department for Quantum Optics and Statistics

Institute of Physics, Albert-Ludwigs-Universität Freiburg

Hermann-Herder-Str. 3, D-79104 Freiburg

Home page : <https://quantum.uni-freiburg.de/>

Email: a.buchleitner@physik.uni-freiburg.de

Dr. Fortunat Rajaona Solofomampionona | Research Fellow

Department of Computer Science

Faculty of Engineering and Physical Sciences University of Surrey

Guildford GU2 7XH, Surrey, United Kingdom

Home page : <https://sfrajaona.github.io/home.html>

Email: s.rajaona@surrey.ac.uk