

# ANA LUCIA CRUZ

## Robotics Engineer & Science Communicator

@ anacruz.ruiz.hn@gmail.com  
in linkedin.com/in/acruzruiz

+44 751 537 8597  
github.com/Tonks89

London

www.analuciacruz.me/



## EDUCATION

### PhD in Mechanical Engineering

INRIA (French research institute for digital sciences), ENS Rennes

Nov. 2013 – Nov. 2016

France

### Master's degree in Advanced Robotics

École Centrale de Nantes

Sept. 2011 – Sept. 2013

France

### Bachelor's degree in Mechatronics

Universidad Tecnológica Centroamericana

Jan. 2007 – Mar. 2011

Honduras

## ADDITIONAL EDUCATION

### Robotics Nanodegree

Udacity (with BOSCH, Electric Movement, KUKA)

May 2017 – Oct. 2017

Online

Autonomous navigation of mobile robots, object recognition, pick and place, deep learning for semantic image segmentation.

### Machine Learning

Coursera (by Stanford University)

Jan. 2017 – Mar. 2017

Online

## WORK EXPERIENCE

### STEM Lead

La Scuola Possibile

2018 - 2019

Italy

Lead curriculum developer & teacher of STEM subjects (including robotics & coding) from elementary school to high school.

### Software engineer

Objective Software (BMW partner)

Jan. 2018 – April. 2018

Italy

Assisted in the development and maintenance of car features, as part of the embedded systems team (lights domain).

## MY LIFE PHILOSOPHY

*"There is no greater education than one that is self-driven."*

## MOST PROUD OF



### Promoting STEM

I design and organize workshops to promote STEM and to democratize STEM education.



### Inspiring women to pursue careers in tech

I have been part of initiatives focused on motivating Honduran girls to pursue careers in STEM.



### Winner Fondation Centrale Scholarship



### Speech at Les Invalides, Paris

I had the chance to talk about my country and how the Fondation Centrale scholarship helped me become a robotics engineer.

## LANGUAGES

English



Spanish



French



Italian



## TECHNICAL SKILLS

Robotics

Coding

Mechanical design

Biomechanics

Bio-inspired control

Machine learning

Artificial Intelligence

MATLAB

Python

C++

ROS

Simulink

V-rep

CATIA

PhD student

**INRIA - Project ENTRACTE (Anthropomorphic Action Planning and Understanding)**

📅 2013-2016

📍 France

Designed new and compact motion controllers for virtual characters (with bio-inspired actuators) based on human motion data.

Supervisor mechatronics projects

**ENS Rennes**

📅 2014-2016

📍 France

Designed and supervised freshman year projects at the ENS university.

Robotics engineer (Internship)

**IRCCyN & Laval University (Canada)**

📅 Mar. 2013 – Aug. 2013

📍 France

Designed a graphical user interface for the analysis and parametric design of Cable Driven Parallel Robots (CDPRs).

Mechatronics engineer

**3D Solutions**

📅 Jul 2010 – Dec. 2010

📍 Honduras

## STEM ADVOCACY

STEM Goals day and mini-hackathon

**STEMETTES & TD Securities**

📅 October 2019

📍 London

Move It Forward Torino - Women for digital and social innovation

**Digital Leadership Institute**

📅 April 2018

📍 Italy

Speaker at the "International girls in ICT day"

**International Telecommunications Union**

📅 April 2016

📍 Honduras

Speaker at an event by IEEE/WIE (Women in Engineering)

**WIE, UNITEC**

📅 Mar. 2016

📍 Honduras

Speaker at the event "Just like robotics, you have a great future"

**École Centrale de Nantes**

📅 Feb. 2016

📍 France

Speaker at CIC Bank's ceremony at Les Invalides

**Fondation Centrale**

📅 Dec. 2012

📍 France

## PERSONAL SKILLS

Motivated

Organized

Perseverant

Instructive speaker

Attentive to detail

Clear and concise writer

## HOBBIES

- Writing
- Reading
- Tutoring
- Playing piano (classical, pop/rock)

## REFEREES

**ADRIANO TRAVAGLIA**

@ Director AFGE, Start-up and EU Project Manager, General Director of Torino 3.0

✉ Travaglia@afge.eu

Italy

**Prof. STEPHANE CARO**

@ Research director (ROMAS team) LS2N, École Centrale de Nantes

✉ Stephane.Caro@ls2n.fr

France

**Prof. PHILIPPE CARDOU**

@ Professor, Mechanical Engineering, University of Laval

✉ Philippe.Cardou@gmc.ulaval.ca

Canada