

Mario Alberto García-Ramírez, PhD

Research Centre for Innovation in Aeronautic Engineering

Mechanical and Electrical Engineering Faculty

Universidad Autónoma de Nuevo León, México



**FIME**

FACULTAD DE INGENIERÍA MECÁNICA Y ELÉCTRICA®

# A bit about Edu-based path.. so far

- I am from **Michoacán (P'urhépecha Empire)**, centre west in México
- I did my undergrad in Electronic Eng at “Instituto Tecnológico de Morelia”
- My Master degree I've got it from the National Centre for Astrophysics, Optics and Electronics (INAOE) in the field of Optical Communications
- My PhD I get it from the University of Southampton, UK from the Nano Research Centre
- I did two post docs at Nano Research Centre

# Work Experience...

- Whilst in my undergrad, I did my social service, thesis and worked as a junior eng at a Radiotelescope

([www.mexart.unam.mx](http://www.mexart.unam.mx))

- We developed an antenna array of 4046 dipoles
  - Developed a few techniques to detect stellar sources
  - Proficiency in several equipments such as: Spectrum Analyser, Vectorial Voltmetre, Network analyser, among others
- Whilst in Masters at INAOE
    - FPGA design of libraries
    - Sensors by using optic fibres
    - Numerical analysis by using solid-state simulator software

# Professional experience, so far ...

- Design, fabrication and characterisation of nano-devices
- Numerical analysis by using: FEM, ab-initio, Molecular
- Languages: C/C++, Fortran, Matlab, Latex, GNUPlot
- Operative Systems: Linux/Unix, OS and not so proud to mention, windows.
- Teaching in several areas such as: Eng, bio, Physics, Math and Software-based

# My published work and experience...

- Few of my publications are in: Academia.edu, Researchgate.net
  - My production is over 6 journals
  - 1 book
  - Well over 50 international conferences
  - 3 international invitations as a Speaker
  - Hundred of hours spent on the cleanroom
  - Thousand of hours spent on numerical analysis
  - Quite a few days/nights crying
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# Interests ...

- Nano/meso devices: design, fabrication and characterisation such as: Single Electron Transistors, Gyroscopes, Inertiometres, Memories, ...
- Bio-devices: sensors tailored for a particular either decease or to find “something”
- Magnetic monopoles, how to find them, how to detect them and easy way is through satellites
- Books, Hiking, Climbing, Photograph, Films, Wine, Cheese, Travel, Teach, Dive, Engines, Long walks with my dog, etc.....

# Thanks

I'm looking forward to having some fun with you, learning, sharing experiences as well as, later on, do some projects in collaboration among our either Universities or Countries

Cheers!

