LUZ ALEJANDRA MAGRE COLORADO

+353 894994525 - Dublin, Ireland

luz0928@gmail.com - luz0928.github.io - linkedin.com/in/luzmagrecolorado

PROFILE

Highly motivated and experienced researcher with a background in mechatronics engineering. Skilled in problem solving and critical thinking, with a demonstrated ability to conduct thorough research and analysis. Strong understanding of various engineering topics, including Internet of Things, domotics, UX Design, UX Research, Human Factors, engineering applications, and more recently, Virtual Reality. Proficient in using a variety of research tools and techniques, allowing to take on new topics and promptly learn about them. Excellent communication skills, both oral and written, and a proven track record of presenting research findings in a clear and concise manner. Dedicated to staying current with the latest developments in the field.

EDUCATION

PhD Track in Electronic Engineering, Dublin City University   2021 - Present
Funded by the SFI Centre for Research Training in Digitally Enhanced Reality (d-real)
Thesis work (in progress): "Smart garments for immersive home rehabilitation using AR/VR"

Master in Engineering with Emphasis in Electronics, Technological University of Bolivar   2016 - 2018
Funded by the Excellence and Adoption Center on Internet of Things (CEA-IoT).
Thesis work: "Security in 1-wire system. Case study: Home automation"

Bachelor of Mechatronics Engineering, Technological University of Bolivar   2010 - 2015
Thesis work: "Kinematic parameter estimation using close range photogrammetry for sport applications". Granted a "Thesis with Honors" distinction.

WORK EXPERIENCE

Intern   May 6th 2024 - Aug 2nd 2024
Arup   *Dublin, Ireland*

- Work placement in the Assets and Operations team.

Full-time Professor   Jul 2019 - Dec 2021
Technological University of Bolivar   *Cartagena de Indias, Colombia*

- Full-time professor of the Mechatronics Engineering programme.
- Courses taught: Medical Robotics, Concurrent Design, Mechatronics Engineering Seminar, Mechatronics Workshop, Domotics, Digital Transformation. Research Topics: Internet of Things, Biomedical applications, Domotics, User Interface Design.
- Publication Chair and Editor of the "2020 IX International Congress of Mechatronics Engineering and Automation (CIIMA)" Conference Proceedings. ISBN: 978-1-7281-9496-7. DOI: [10.1109/CIIMA50553.2020.9290172.](https://doi.org/10.1109/CIIMA50553.2020.9290172)

R&D Engineer   Jan 2018 - Jul 2019
Dematinada S.A.S   *Cartagena de Indias, Colombia*

- Developed a communication system for domotics through mobile devices for the company AKP Systems, located in Portugal.
- Published and maintained the app on Google Play Store, Apple App Store, and Amazon Appstore.

Research Assistant   Feb 2016 - Dec 2017
Center of Excellence and Adoption on Internet of Things (CEA-IoT)   *Cartagena de Indias, Colombia*

- Responsible for the research and Development of IoT prototypes for industry and agriculture.
- Research in security protocols oriented to IoT.

Technical Support Specialist   Feb 2017 - Dec 2017
Ormuco Cloud Inc   *Cartagena de Indias, Colombia (Remote)*

- Provided technical support to customers and kept documentation up to date.

- Worked in Cloud management and some front-end development.

Apprentice   Sep 2016 - Jan 2017
Ormuco Cloud Inc   *Cartagena de Indias, Colombia (Remote)*

- Provided technical support to customers

- Trained for cloud management

SKILLS

Programming skills
Javascript, Python, HTML, C++, Arduino, Matlab

Technology skills
UX design, UX research, Human Factors, Figma, Low fidelity prototyping, high fidelity prototyping, Internet of Things, Rapid prototyping, Unity, FreeCAD, Raspberry Pi, Cloud User, Microsoft Office, Windows, Linux

Soft skills
Team work, verbal and written communication, problem solving, adaptability, interpersonal skills, critical thinking, project management

Languages
Spanish (Native), English (C1), German (A2), French (A2)

PUBLICATIONS AND CONFERENCES

Published and participated in 17 conferences and scientific events. Topics of the papers include: Internet of Things, Information Security, visual tracking, and sensor systems and different fields of application.

For a complete list of publications and conferences as well as the full-texts, please visit my ORCID or ResearchGate Profile

ADDITIONAL RELEVANT TRAINING

Extended Reality for Everybody Specialization Issued March 2024. Online course offered through Coursera by the University of Michigan. Link to credential

Google UX Design Professional Certificate Issued December 2023. Online course offered through Coursera by Google. Link to credential.

Post-CHI Summer School on Extended Reality (XR) From 2nd to 4th of May 2023. University of Copenhagen, Copenhagen, Denmark.

Spring School on Social XR From 13th to 17th of March 2023. Centrum Wiskunde & Informatica (CWI), Amsterdam, The Netherlands.

3D Interface Technologies Completed in April 2022. GTE element offered by Dublin City University.

Introduction to Virtual Reality Issued Dec 2021. Online course offered through Coursera by the University of London. Link to credential.

REFERENCES

Shirley Coyle Assistant professor, School of Electronic Engineering, Dublin City University. Ireland
Email: shirley.coyle@dcu.ie Phone: 01 700 5937

Jorge Franco Cloud Administrator, Ubisoft Inc. Montreal, Canada
Email: jorgefrancoibanez@gmail.com Phone: +1 4384079054