

EMPLOYMENT HISTORY

06/2021 – Present

Ph.D Fellow | Aarhus University, Aarhus, Denmark
Department of Electrical and Computer Engineering – Software Engineering and Computing Systems

05/2020 – 06/2021

Consultant | SIATA (Sistema de Alerta Temprana de Medellín y el Valle de Aburrá), Medellín, Colombia
Under the administration of EAFIT University

- Implementation of IoT networks.
- Telematics for environmental variables.
- Integration of electronic circuits with communication networks for early warnings.
- Integration of information systems associated to processes and networks in deployment.

02/2018 – 02/2021

Researcher | Universidad Nacional de Colombia, Medellín, Colombia
Researcher at Grupo T&T research group

- Research in IoT technologies for the power and energy industry.
- Develop and design IoT networks and required software.
- Propose and state projects with emerging technologies.
- Research in Industry 4.0 topics, advanced automation systems and semantic web technologies for automation systems.
- Research and development in data analytics and intelligent systems.
- Applied research for industrial approaches.

07/2019 – 08/2019

Occasional Professor | Universidad Nacional de Colombia, Medellín, Colombia

Subject: Ontological Engineering (graduate course).

04/2017 – 02/2018

Project and Developer Engineer | Imecontrol S.A.S, Envigado, Colombia

- State the automation and software projects for customers.
- Develop software applications and automation software for customers' projects.
- Execute projects in place.

07/2016 – 01/2017

Control Engineer Practitioner | Empresas Públicas de Medellín (Epm), Medellín, Colombia

- Assist in the update of the unit drivers in the Central Tasajera hydroelectric power plant.
- Design of the automata model for the start-release sequence in the unit drivers.
- Assist in the electronics and instrumentation projects.

EDUCATION

06/2021 – Present

Aarhus University| Aarhus, Denmark

Ph.D: Supervisor: Prof. Peter Gorm Larsen, Co-supervisor: Prof. Alexandros Iosifidis
Engineering

06/2017 – 06/2019

Universidad Nacional de Colombia| Medellín, Colombia

MEng: Systems Director: Ph.D. Germán Darío Zapata Madrigal
Engineering

2020 Lorem ipsum dolor sit amet

Thesis: A proposal of a formal model to integrate distributed service-based automation systems, semantic models, and automation standards.

GPA: 4.9 on a 5.0 scale.

02/2012 – 12/2016

Universidad Nacional de Colombia| Medellín, Colombia

BSc: Control Engineering

GPA: 4.6 on a 5.0 scale.

ADDITIONAL TRAINING

- English course | CAMIL Institute | Medellín, Colombia | 02/2014 – 07/2015 | 576 hours.
- German course (A1.1, A1.2, A2.1, A2.2) | Universidad Nacional de Colombia | Medellín, Colombia | 02/2018 – Current | 64 hours per level.
- CCNA 1 | Cisco Networking Academy | 08/2015 – 12/2015 | 70 hours.
- Internet Of Everything | Cisco Networking Academy | 08/2015 – 10/2015 | 20 hours.
- CCNA 2 | Cisco Networking Academy | 02/2016 – 06/2016 | 70 hours.
- Entrepreneurship | Cisco Networking Academy | 02/2016 – 04/2016 | 15 hours.
- Master in Java Programming (Online) | Learning and Training Cloud | 02/2017 – 12/2017 | 450 hours.
- Training in Business models and pitch | Creame Business Incubator and Colombia Government | Medellín, Colombia | 11/2017.
- Basic IoT | Alcaldía de Bogotá | 01/2019 | 30 hours.
- LoRaWAN Academy Course | LoRaWAN Academy | 08/2019.
- Data Science 4 All Program (graduated with honors) | Correlation One & Ministry of Information and Communication Technologies of Colombia (MINTIC) | 2020 | 375 hours.

ADDITIONAL SKILLS

- Software: PLC IEC 61131 Languages, Matlab, LabView, Lua, C-C++, Python, Java, Web Development (HTML, CSS, JavaScript, Django, Flask, PHP), Databases (SQL, SPARQL, plain text), Linux-based Platforms and Shell, Service-based applications.
- Design, Building and Operation of Automation Systems.
- Data Science and Analytics: ETL, Basic Analytics-Statistics, Machine Learning (supervised and unsupervised) – Tools: Python – Pandas, NumPy, TensorFlow, Keras, Scikit Learn, Jupyter, Matplotlib, Plotly. – Bash(Shell scripting). – Apache: Hadoop, Pig, Hive.
- Electronics and Embedded Systems.
- Information and Communication Technologies.
- Management and Entrepreneurship.
- Management and Formulation of Research Projects.
- Semantic Web Technologies: OWL, RDF, SWRL, SQWRL, SPARQL.
- Scientific Drafting and Writing.

LANGUAGES

Spanish (Native)

English (Fluent) – IELTS C1 (Band 7.0) - 02/2021

German (Intermediate)