

Jorge Andrés Cock Ramírez

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Birthdate: 26/10/1971

Place of birth: Medellín, Colombia

Nationality: Colombian

CONTACT







https://jorgecock.github.io/ind exeng.html



in https://www.linkedin.com/in/jor ge-andres-cock-ramirez-317b7029

S jorgecock (Skype)



ABOUT ME

Production Engineer, with a Master's degree in Engineering, specialist in automation, and technologist in information systems analysis and development, focused on the fields of advanced manufacturing, automation, robotics, mechatronics, information systems, software, industrial processes, and production management.

University professor and lecturer, with experience in both industry and academia. Experienced in Research and Development (R&D), technology and project management, plant maintenance, and production support.

With basic knowledge and experience in developing and programming information platforms using PHP, HTML5, APIs, SQL, FrontEnd and BackEnd implementation, API and firmware development, and microcontroller programming with IoT,

A curious and collaborative spirit, constantly learning. For example, currently studying web frameworks, agile methodologies, and cybersecurity.

WORK EXPERIENCE

03/2015 - 12/2024 Medellín, Colombia

Instructor and Researcher

National Learning Service SENA

— Instructor for the programs of Industrial Production Management, Production Plant Resource Management, Integrated Quality Management, and Electromechanical Maintenance, teaching subjects such as Automation Fundamentals, Manufacturing Processes, Advanced Electronics, Descriptive Statistics, Statistics and Sampling, Mathematics, Production Costs, Quality and Productivity, Statistical Process Control (SPC), Financial Mathematics, Procurement and Supplier Management, Entrepreneurship, Inventory Management, Electropneumatics, and Smart Tools.

 Researcher in various projects related to IoT, Manufacturing, Additive Manufacturing, Software Programming, and Technological Design and Management.

06/2015 - **12/2019** Medellín, Colombia

University professor of engineering

Luis Amigó Catholic University

- Professor of the subjects: Research Methodology (general and quantitative), Metrology, Science, Technology and Innovation Management, Materials Science, Applied Mathematics, and Strategic Planning for Systems..
- Editor of the scientific engineering journal Lámpsakos.

01/2013 – 06/2014 Caldas, Antioquia, Colombia

University professor of engineering

Lasallista University Corporation.

- Professor of the subjects: Advanced Production, Industrial Maintenance Seminar, Industrial Processes, and Digital Circuits...
- Researcher in the design and assembly of a prototype device for insulation and temperature regulation of isothermal boxes, with a granted patent.

07/2012 - 12/2012 Medellín, Colombia

University professor of engineering

Metropolitan Technological Institute (ITM)

— Professor of the subjects: Data Acquisition Systems, Signal Conditioning, Signal Analysis, Robotics Principles, and Wireless Networks.

02/2012 - 07/2012 Medellín, Colombia

Technical and Commercial Coordinator AWS Solutions in Automation and Welding SAS

- Consultancy, technical assistance, installation, and maintenance of robots and robotic cells.
- Commercialization of Kuka brand robots and welding equipment with different technologies.
- Coordination of the technical department for equipment maintenance.

08/2011 - 12/2011 Medellín, Colombia

Program Coordinator for Business Administration American University Corporation (CUA)

- Coordinate the academic program by monitoring professors, résumés, attendance compliance, and managing micro-curricula. Track the use of classrooms.
- Monitor students, verifying their level of satisfaction and reasons for dropout.
- Teach courses in Strategic Management, Market Management, Administrative Processes, International Strategic Negotiation, and Business Plans.

11/2010 - 02/2011 Medellín, Colombia

Project director Group Swiss Engineering

- Management of production plant installation projects for biofuels, bioethanol, and biodiesel
- Feasibility project for ethanol production using coffee wood and cogeneration.

The company closed, and the project could not be carried out.

04/2007 – 11/2010 Copacabana, Antioquia, Colombia

Corporate-Level Technology Research Analyst, Research and Development (R&D) Haceb Industries.

- Responsible for the management, monitoring, and research of technologies applicable to the manufacturing process and product design. Information and knowledge management.
- Research and Development.
- Leadership in the welding plant project for ovens.
- Development of a manufacturing cell project with a CNC punch press.
- Feasibility study for a tube forming plant and stove manufacturing.
- Other feasibility studies and testing.

10/1996 - 04/2007 Medellín, Colombia

Research and Development Engineer – Automated Test Equipment (ATE) Development Celsa S.A.

- Development of general automation (Software, Hardware, and Firmware) for laboratory and production equipment in manufacturing plants for electronic devices, lighting, and public telephones.
- Participation in the design of electronic products.

06/2013 - ACTUAL Medellín, Colombia

Consulting Engineer and Technician Giram Micrón

Family Business and Freelance Work.

- Maintenance of optomechatronic equipment.
- Company management.
- Development of design projects: mechatronic and robotic products, automation, and software.
- Supervision of thesis projects, project evaluation, and academic research guidance.
- Web consulting.

6/1991 - 6/2020 At different time intervals. Medellín, Colombia

University Engineering Professor, Monitor, Assistant Universidad Eafit

- Professor of the subjects: IoT, actuators, sensors, hydraulics and pneumatics, Machine Elements Project, Solid Mechanics, Control Systems, Robotics.
- Monitor for Physics and Technical Drawing.

EDUCATION AND TRAINING

25/07/2014 Medellín, Colombia

Master's Degree in Engineering | Pontifical Bolivarian UniversityUPB | Web www.upb.edu.co

Field of Study: Electronics and Automation, Engineering, and related professions without further definition

EQF-MEC Level: Level 7 | **Thesis:** Control of a Parallel Geometry Robot

07/09/2001 Medellín, Colombia

Specialization in Automatics | Pontifical Bolivarian University UPB | Web www.upb.edu.co

Field of Study Electronics and automation | **EQF-MEC Level:** Level 7 | **Thesis:** Study on Cooperative Robotics and Fractal Cellular Systems

12/12/1996 Medellín, Colombia

Production Engineering | Eafit University | Web www.eafit.edu.co

Field of Study Industry and production without further definition | **EQF-MEC Level:** Level 6 | **Thesis:** Design of a Data Acquisition System for a Seismic Engineering Project by Universidad Nacional, EAFIT, and Colciencias.

22/02/2024 Medellín, Colombia

Technology in Analysis and Development of Information Systems ADSI National Learning Service SENA

Web <u>www.sena.edu.co</u> **Field of Study:** Information and Communication Technologies (ICT) without further definition, Development and Analysis of Software and Applications | **EQF-MEC Level:** Level 6

2014 Caldas, Colombia

Diploma in Technology Assessment

Lasallista University Corporation | Web www.unilasallista.edu.co

2007 Medellín, Colombia

Diploma in Supervisor Management in the Manufacturing Industry

San Buenaventura University | Web www.usbmed.edu.co

LANGUAGE COMPETENCES

MOTHER LANGUAGE(S): Spanish

Other language(s):

English

Listening comprehension B1 Oral Production B1 Reading comprehension C2

Oral interaction B1 Written expression B2

DIGITAL COMPETENCIES

Interaction through digital technologies | Gmail | Proficiency in Google tools (Gmail, Drive, Google Forms, etc.) | Microsoft Office (Word, PowerPoint, Excel, Access, Project) | PDF | 3D Tools | SolidWorks | AutoCAD | Cura | PHP, HTML, CSS, JS, SQL | Basic knowledge of C++ and Java | NI LabVIEW | Internet of Things (IoT).

Pneumatics and Hydraulics | Robotics | Electronics & Electricity | Statistics and Inference | Mathematics | Microcontrollers | Arduino | 3D Printing

SOFT SKILLS

Problem-solving | Critical thinking and analysis | Communication | Project management | Teamwork | Fast learning ability | Adaptability | Workplace responsibility.

Declaration:

I declare that the information provided in this document is truthful and corresponds to my experience and qualifications. I authorize the processing of my personal data for the purposes of selection processes, in accordance with the applicable data protection regulations..

Medellín, Colombia, 24/02/2025

Jorge Andrés Cock Ramírez