Curriculum vitae Frangil Ramírez

# PERSONAL INFORMATION Frangil Bradimir Ramírez Chacón

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### **PERSONAL STATEMENT**

Systems engineer specialized in advanced control with over twenty years of experience working as a controls engineer, researcher and university lecturer in software engineering. The expertise in design, development, implementing and integrating systems using various technologies and methodologies has been applied to industrial production and also to research experiments. Actually working as a controls engineer responsible for the controls of the gamma-beam system at ELI-NP (Extreme Light Infrastructure, Nuclear Physics), Romania.

# **WORK EXPERIENCE** 2018-Present

# Controls Engineer, ELI-NP, Magurele (Romania)

Responsible for the controls of:

- The GBS (gamma-beam system).
- Experimental setups of the gamma driven experiments department. (cooling and heating control with LN<sub>2</sub> and resistant applied heat process).
- Collaboration control activities between ELI-NP (Romania) GSI/FAIR (Germany) for developing voltage controls applications for Nuclear Physics.

#### 1993-2018

# Computer science lecturer

Universidad Católica Andrés Bello, Puerto Ordaz (Venezuela) Universidad Experimental de Guayana, Puerto Ordaz (Venezuela)

- C/C++ programming
- Software engineering

# Technical Development Specialist/researcher.

CVG Venalum, Puerto Ordaz (Venezuela)

- Designing and developing complex systems for Aluminum Smelters: A distributed Control System for High Amperage Reduction Cells, improving the overall efficiency of the production process.
- Installation Consultant of Control System for baking furnaces in the anode plant. A DCS project (PLC and DC).
- Process Control Engineer, responsible for the improvement of aluminum production processes.

# In collaboration between CVG Venalum-Alcasa, and CVG Venalum-Cabelum.

- Design of Control System for aluminum wire-drawing machines. OPTO22-PID's.
- Design and development of UI and Control Systems for the anode plant (programming with block diagrams), Vertical-casting plant, and baking furnace. PLC and DC.

### **EDUCATION**

#### 1996-1997

# MSc. in Advanced Control

- University of Manchester Institute of Science and Technology UMIST, Manchester (United Kingdom).
- Conicit-CVG VENALUM, loan-scholarship for Master's degree, 1996-1997.

# 1986-1993

### Systems engineer

- Universidad de Los Andes, Merida (Venezuela) Grade: Systems Engineer. First Place, School of Systems Engineering. (1st /42).
- Lagoven S.A., scholarship for college degree, 1989-1992.

# **PERSONAL SKILLS**

Mother tongue(s) Foreign language(s) Organisational / managerial

#### Spanish English

- Leadership in control systems automation projects, programming.
- Software design and programming leader and guiding in software projects.

#### Job-related skills

- Controls applications design, programming, web applications, agile, classical methodologies, systems analysis, modeling, lecturer.
- Automation, hardware wiring, electronic and electrical circuits diagrams expertise, troubleshooting, international team work, goal oriented independent worker, network and serial communications.

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### Tech skills

 Actually working with: C++/CLI, C#, Visual Studio, Node.js, Mongo DB, Express, EPICS, LabView, cRio/DAQ, Raspberry Pi, EPICS controls, Python.

- Programming languages: C/C++/CLI, .NET, LabView, Python, SQLite, HTML, CGI, DataServer – Node.js, Express, Pug, AngularJS, Mongo DB.
- Operating systems: QNX, Linux, Windows.
- Suites: Visual Studio, Borland RStudio, Qt.
- Others

SCRUM, XP, Traditional, CMMI, OOP, Patterns, MDD, TDD. Fltk with IPC, network and serial communications protocols (EPICS, SNTP, IP UDP), Opto22, PC104, DCS, Circuits diagrams, wiring. Adaptive algorithms, motors, Matlab, pc104.

### **Publications**

CVG-VENALUM POTLINE CONTROL AND SUPERVISORY INTEGRATED SYSTEM VEN-PCSIS. **Light Metals 2010** *TMS* (The Minerals, Metals & Materials Society) 2010. José Ramones, *Frangil Ramírez*, María Colmenares, Jesús Lárez, Jesús González.

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