

# EDENILSON LOPES DE MEIRA – SOFTWARE DEVELOPER

ONTARIO

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## COVER LETTER

For many years, I have been working in manufacturing, maintenance and/or management performing technical duties in the automation, electrical, electronic, instrumentation, software, and IT departments of large (multi-national) companies. I started as an industrial electrician and went on to perform several different roles in my career. This has given me a wide range of skills perspectives across different fields and the skills to understand several aspects of the business: electrical, electronic instrumentation, metrology, mechanics, robotics, PLC programming, SCADA, game development, modeling and simulation systems.

A non-exhaustive list of my responsibilities includes:

- Instrumentation calibration,
- Repair/replacement of electrical/electronic components
- Robotics and PLC programming
- Software design/programming, documentation and technical training
- Contacting suppliers, budgeting and pricing,
- Implementation and maintenance of new electronic instrumentation
- Project Management
- SCADA development and HMI programming
- Modeling and Simulation Development
- Game Development

I have developed solutions for software using a variety of tools and platforms. My background in programming languages such as C/C++/C#, assembly and PLC programming has prepared me to deal with many different problems and helped me to work with fast approaches to find better, more reliable, and faster solutions. I am experienced with temperature controllers, displacement measuring systems, vibration analysis and pressure measurement, and can provide the technical support needed to face most of the problems involved with electronic instrumentation and software development. My understanding on AGILE methodology and Scalable AGILE Framework (SAFe5) is an important aspect of my current position, which requires highly specialized technical skills that I keep building over the years to ensure that the solution I present is up to date with the latest technologies and it uses the highest level of performance, only achievable as a result of constant research and development of complex algorithms. To summarize: I love what I do, and software development is my way to combine all these experiences into one set of skills that always help me to be a productive and interactive part of the team.

## SECURITY CLEARANCE INFORMATION

- Clearance Level: Secret Clearance Level II (2020-2030)

## EDUCATION

- Master of Information Systems, Athabasca University (in-progress: Dec,2026)
  - Research in A.I. and Simulation Systems

## PROFESSIONAL DEVELOPMENT/ACCREDITATIONS

- C.M.S.P. – Certified Modeling and Simulation Professional, Master Level since April 2022.
- C.I.P.S. – Canadian Information Processing Society – member since June 2022.
- O.A.C.E.T.T. – CTech member since October 2013
- SAFe 5 – Scalable Agile Framework Practitioner – since October 2022.
- Diploma: Precision Industrial Mechanics Technician, SENAI Suiço-Brasileiro (1991)
- Certificate: Industrial Electronics Technician, SENAI Ary-Torres

## LANGUAGE

English: Fluent, oral, and written

## PROFESSIONAL EXPERIENCE

### ADGA GROUP CONSULTANTS INC – CANADA

KINGSTON, ON

#### *Senior Software Engineer*

May 2022 – Current

#### *Simulation, Technical Investigation and Engineering Services (SIMTIES)*

- Program in C# and C++
  - Debug DND applications
  - Develop code using Design Patterns and SOLID principles.
  - Use QT framework to develop GUI applications in C++.
  - Develop using OpenGL libraries (SDL, GLAD, GLEW and GLFW)
  - Develop 3D models and fbx/obj files in Blender, Reallusion CC3 and 3DXChange.
  - Develop code for VR applications.
  - Use Vortex Simulation Platform.
  - Use Unity to develop simulation environments.
    - Unity
      - Evaluate/Integrate code into an existing system,
      - Make decisions required to prototype new concepts,
      - Determine code to interact with programming logic,
      - Implement scene management and transitions,
      - Apply data persistence within a runtime session,
      - Determine proper usage and application of Unity API
      - Design, code and implement GameObjects and components,
      - Code using inheritance, interfaces, and data structures,
      - Deploy builds,



- Design and Implement user interfaces (UI),
- Bind data to UI components,
- Use UI input system to trigger events,
- Design and implement user interface menus.

**Program Analyst**

August 2021 – May 2022

**Modeling and Simulation - MODSIM**

- Program in Java
  - Use Apache Maven framework,
  - Use Protobuffer to serialize/deserialize files,
  - Use JavaFx for frontend development.
- Familiar with Game engines Unity/Unreal,
- Work in Linux environment, use bash commands and produce scripts,
- Setup Virtual Machines with VMWare,
- Use Git and GitLab for version control and management, familiar with GitKraken user interface,
- Use Gitbash, CMD and PowerShell (ISE) for command line inputs and scripting,
- Work with XML and JSON file formats,
- Use Blender, Reallusion CC3 and Zbrush for 3D modeling and creation,
- Use Photoshop, Adobe Illustrator, Premiere Pro, and After Effects for video and image production,
- Work with Visual Studio 2019 and IntelliJ IDEA for Integrated Development Environment,
- Use Wireshark to analyze network traffic and information packets,
- Use SSH and WinSCP for file sharing.

**BOMBARDIER TRANSPORTATION – CANADA**

KINGSTON, ON

**SCADA Analyst**

July 2011 – May 2020 (8 years, 10 months)

- Responsible for a variety of programming which included using OOP, JScript.Net, Visual C# (C sharp), HTML5, as well as Visual Studio and VS code IDE, familiar with S.O.L.I.D. best practices for object-oriented design and development.
- Successfully administered technical training in two languages (Portuguese and English)
- Participated in the estimation of cost for bidding process for several projects spread around the world, including software licenses, hardware requirements and “in-house” development cost.
- Configured alarm tags and data loggers as well as created databases for memory mapping and language translation,
- Assisted with vendor management and contract negotiation while creating structure and material for technical manual,
- Wrote a variety of technical documentation for projects which included software requirements specification, software functional/version/architecture design and factory acceptance test procedures and reports,
- Good knowledge of CENELEC 50128 (IEC 62279) Standard for the transportation industry
- Applied predictive or adaptive approaches to system designs,
- Documented technical guidelines for projects while designing and writing internal/external system requirements using UML tools, case diagrams and class model diagrams,
- Designed SCADA systems based upon client’s requirement.



**TRANSFORMIX AUTOMATION**

KINGSTON, ON

**Site Manager**

April 2010 – July 2011 (1 year, 3 months)

- Professionally directed and managed engineering team travelling from Canada to Brazil,
- Reported and controlled project budget,
- Interfaced with client to create strategies and planning for the project development,
- Interfaced between Brazil and Canada government's requirements for legal documentation,
- Assisted with technical cross reference regarding standards/norms between Canada and Brazil,
- Responsible to ensure Brazilian laws of work permit and documentation were followed for visiting engineers,
- Liaison between Canada and Brazil to negotiate local contractors and new businesses,
- Point of contact for politicians and media (such as meetings with city major and radio interviews),
- Responsible to write technical procedures and training of Brazilian engineers,
- Responsible to coordinate enterprise implementation of a \$3 billion dollars project,
- Supported legal teams for both countries on business negotiations and regulations,
- Supported engineers on troubleshooting and programming servo motors,
- Supported local electricians and mechanics on technical issues.

**RESEARCH IN MOTION**

WATERLOO, ON

**Instrumentation Technician**

September 2009 – April 2010 (8 months)

- Calibrate electronic instrumentation of production line,
- Keep and update databases control for calibration,
- Repair and troubleshoot electronic instrumentation,
- Debug and modify C code for certain instruments,
- Programmed and troubleshoot Allen Bradley PLCs in production lines,
- Produced technical reports,
- Troubleshooted AC/DC motors,
- Wrote and performed testing procedures,
- Kept instruments up to date with ISO 9000 requirements for quality control,
- Priced and contact suppliers for electrical/electronic components.

**ADDITIONAL PROFESSIONAL EXPERIENCE**

- The Pressure Pipe Inspection Company (PPIC) – Field Technician
- Hendrickson Spring International – Robot Technician and Automation Lead
- Schaeffler Canada/FAG Aerospace – Metrology Instrumentation Technician
- VLM Industrial Automation (Brazil) – PLC Programmer
- FAG Bearings Ltd (Brazil) – Quality Control Auditor
- FAG Bearings Ltd (Brazil) – Industrial Electrician

**ADDITIONAL SKILLS/KNOWLEDGE**

- HTML5 and CSS3
- Familiar with JavaScript/ES6
- Redmine Repository, Subversion, GIT Source Control and GitLab
- AGILE methodology

