

# Jorge Oguilve Araya

## Curriculum Vitae

### Education

2002–2005

**Master of Engineering in Modern Manufacturing Systems (Cum Laude Recognition)**, *Instituto Tecnológico de Costa Rica*, Cartago, Costa Rica.

1995–2000

**Bachelor of Science in Mechanical Engineering**, *Universidad de Costa Rica*, Montes de Oca, Costa Rica.

1995–1997

**Private Pilot**, *Escuela Costarricense de Aviación*, Pavas, Costa Rica.

1993–1994

**High School Diploma**, *Colegios Científicos de Costa Rica*, Pérez Zeledón, Costa Rica.

### Experience

2006

**Operations Director (current)**, *Ad Astra Rocket Company*, Liberia, Guanacaste, Costa Rica.

- Responsible for the overall operation of the Costa Rica facility, including Environmental, Health and Safety Management;
- Planning, Coordination and Execution of Engineering Projects involving Equipment and Component Manufacturers, External Consultants, Contractors and Customers, working in the development of a new plasma space propulsion system (VASIMR) and Renewable Energy Systems (specially Wind Power and Superconductivity).

2006

**Professor (current)**, *Universidad de Costa Rica*, Liberia, Guanacaste, Costa Rica.

- Engineering Technical Drawing course professor.
- Structural Vector Mechanics (Statics) course professor.

2001–2005

**Product and Process Engineer**, *Baxter Healthcare Corporation*, Cartago, Costa Rica.

- Lead local automation projects with Internal Rates of Return (IRR) higher than 40 percent with a total investment value in excess of 13MM dollars;
- Responsible for the production and uptime of machines in the automation area, achieving availability indicators higher than 98 percent.

2000–2001

**Test Engineer**, *Intel Corporation*, Belén, Costa Rica.

2000

**International Co-op Intern**, *Advanced Space Propulsion Lab at National Aeronautics and Space Administration (NASA)*, Houston, TX, United States.

## Computer Skills

2006

**Finite Element Analysis (FEA) and Computer Aided Design (CAD)**, *Extensive experience on CAD (ProEngineer, Inventor) and Finite Element Analysis software packages (ProMechanica). The last work performed in that area is shown on section C. of the publication: Squire, J.P. Carter, M.D. Chang Díaz, F. R. Giambusso, M. Glover, T. Ilin, A. Oguilve-Araya, J. Olsen, C. et al. VASIMR Spaceflight Engine System Mass Study and Scaling with Power. As a university professor on that field, I have the basic understanding of other software packages and the theory and approach behind them.*

2006

**Operating Systems and Packages**, *I have proficient knowledge of the following operating systems and packages: Linux, Windows, IOS, Microsoft Project, Matlab, AutoCAD, ProEngineer, ProMechanica (FEA), Windchill PLM, Inventor, SolidWorks, Arena, Statistical Packages, Microsoft and Libre Office.*

## Continuing Education Courses

2009

**General Intellectual Property Course**, *World Intellectual Property Organization (WIPO-OMPI)*, Geneva, Switzerland.  
Online

2009

**Machine operations: Mill, Lathe, CNC, Cutting tools and Tolerancing**, *Instituto Nacional de Aprendizaje (INA)*, Liberia, Guanacaste y San José, Costa Rica.

2004–2005

**Certified Production and Inventory Management (CPIM)**, *American Production and Inventory Control Society (APICS)*, Chicago, IL, United States.

2003–2004

**Six Sigma Engineer**, *Baxter Internal Training*, Cartago, Costa Rica.

2003

**The 7 habits of highly effective people**, *Franklin Covey*, Cartago, Costa Rica.

2002

**Simulation using ARENA from Rockwell Software**, *Instituto Tecnológico de Costa Rica*, Cartago, Costa Rica.

2001

**Electrical Safety Standards**, *National Aeronautics and Space Administration (NASA)*, Lyndon B. Johnson Space Center, Houston, TX, United States.

1999

**Introduction to programmable logic controllers (PLC)**, *Electrical Engineering School, Universidad de Costa Rica*, Montes de Oca, Costa Rica.

## Languages

Spanish **Native.**

English **100% proficient.**

## Honors and recognitions

2012 **"40 under 40, 2012 edition": a yearly recognition to 40 people under 40 years old whose work has a proven impact in the country, *Periódico El Financiero*, San José, Costa Rica.**

2011 **Member of the first Costa Rican Team to experience Zero Gravity conditions wearing the Costa Rica flag, *National Aeronautics and Space Administration and Ad Astra Rocket Company*, Houston, TX, United States.**

2011 **Keynote Speaker on the first nation-wide Industrial Engineering Conference, *Universidad Jesús de Nazareth*, San Pedro Sula, Honduras.**

2010 **Keynote Speaker during the inauguration activities of the Business Administration School, *Universidad Nacional*, Heredia, Costa Rica.**

2009 **Speaker on various universities: *Universidad de Costa Rica, Instituto Tecnológico de Costa Rica, Universidad Interamericana de Costa Rica, Various Universities*, San José, Costa Rica.**

2006 **Member of the Team that achieved the first 2 minutes plasma pulse and Steady State Operation on a VASIMR subsystem test bed in Costa Rica, *Ad Astra Rocket Company*, Liberia, Guanacaste, Costa Rica.**

2003 **Intern at the Baxter Healthcare Corporation Tech Center, *Baxter Technical Center*, Round Lake, IL, United States.**

2001 **Certificate of achievement for outstanding contribution to the implementation of the superconducting magnet project, *Advanced Space Propulsion Laboratory, NASA Johnson Space Center*, Houston, TX, United States.**

2000 **Technical Recognition for the preparation and execution of the recovery and remarking process which led to 610K dollars in savings, *Intel Corporation*, Belén, Costa Rica.**

1999 **Winner of the Intel Scholarship for Academic Excellence, *Intel Corporation and Universidad de Costa Rica*, Belén y Montes de Oca, Costa Rica.**

1998 **Sports Merit Recognition for obtaining the highest team ranking in the history of the Perez Zeledón Male Basketball team in National Games (Silver Medal), *Comité Cantonal de Deportes y Recreación de Pérez Zeledón*, Pérez Zeledón, Costa Rica.**

## Interests

- Administrative and Technical Project Management and Mechanical Engineering. I like to solve problems and look for innovative ways to improve products or processes.
- Sports and outdoors I like playing basketball, chess, soccer, ping pong and riding motorcycles. I also enjoy flying airplanes. I love the mountain environment and using the GPS.
- Academia I love teaching and keeping myself updated.
- Others I like to contribute to my community by volunteering.
- Reading I like to read about leadership, management, Costa Rican history, biographies, science fiction and any other interesting topics in the areas previously mentioned.

## References

Available Upon Request. You can also visit my profile on LinkedIn as Jorge Oguilve-Araya.