



EDUCATION

- 2012-2015 **Master of Science in Numerical Simulation.**
Faculty of Engineering –Buenos Aires University. Buenos Aires – Argentina.
Thesis: "Determination of pressure drop in an elastic spacer grid of a nuclear fuel element by computational fluid dynamics (CFD)".
Director of Thesis: Juan Carlos Ferreri.
Co-Director of Thesis: Alejandro Lazarte.
Final Grade: 8,3 / 10,0.
- 2003-2008 **Chemical Engineering.**
Faculty of Engineering – America University. Bogotá – Colombia.
Thesis: "Evaluation of the ethanol incidence in a fuel cell DMFC (Direct Methanol Fuel Cell)".
Final Grade: 7,6 / 10,0.

PROFESSIONAL EXPERIENCE

- 2013-Present **Nuclear Safety Analyst.**
Argentine Nuclear Regulatory Authority. Buenos Aires – Argentina.
- To develop Safety systems Models in RELAP5 for CAREM and Atucha-I.
 - To simulate and analyze transient events with the CAREM25 model made in RELAP5.
 - To perform Thermal-hydraulic calculations on internal nuclear reactor components using CFD.
 - To analyze postulated events transients of chapter 15 for CANDU and PHWR reactors.
 - To review documentation for the licensing of Argentine NPP.
 - To assess the status and testing of the safety systems in the start-up of Atucha-II and Embalse NPP.
- 2016-Present **Teacher Assistant in the Finite Element course.**
Faculty of Engineering, Buenos Aires University. Buenos Aires – Argentina.
Teach the resolution of the practical problems by Finite elements methods.
- 2017-Present **Teacher Assistant in the Thermal-Hydraulics course.**
Faculty of Nuclear Engineering, San Martin University. Buenos Aires – Argentina.
Teach the resolution of the course practical problems.
- 2009-2013 **Process and production engineer.**
Dropur S.A. Buenos Aires – Argentina.
Commissioning of chrome plating plant and copper plant.
- 2006-2008 **Research assistant.**
Faculty of Engineering, America University. Bogotá – Colombia.
- Search bibliography.
 - Assist in the publication process and the organization of conferences.
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**JOSÉ DAVID JIMÉNEZ DÍAZ. MSc.
Nuclear Safety Analyst**

COURSES

- 2017 **Nuclear Reactors Physics.** 3 Months.
National atomic energy commission, (CNEA). Buenos Aires – Argentina.
- 2017 **Relap5 Course.** 1 Week.
Nuclear and Industrial Engineering (NINE). Pisa – Italia.
- 2016 **Radiological Protection and Nuclear Safety.** 4 Months.
Argentine Nuclear Regulatory Authority and IAEA. Buenos Aires – Argentina.
- 2014 **CANDU nuclear power plant.** 3 Months.
Embalse Nuclear power plant. Córdoba – Argentina.
- 2014 **Introduction to ANSYS CFX.** 1 Week.
ESSS. Buenos Aires – Argentina.
- 2014 **Nuclear reactors and nuclear fuel cycle.** 3 Months.
National atomic energy commission, (CNEA). Buenos Aires – Argentina.
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CONFERENCES / PRESENTATIONS

- 2017 **ENIEF 2017, Numerical Methods and their applications.**
A CFX study of temperature distribution in the Calandria Tank of a CANDU-600. La Plata– Argentina.
- 2016 **ENIEF 2016, Numerical Methods and their applications.**
Simulation of natural circulation in a square circuit with CFX. Córdoba – Argentina.
- 2016 **AATN 2016, Argentine Association of Nuclear Technology.**
Evaluation of the mixing process in an outlet Header of a CANDU reactor. Buenos Aires – Argentina.
- 2015 **1st Pan-American Congress on Computational Mechanics. XI Argentine Congress on Computational Mechanics.**
Determination of pressure drops in an elastic spacer grid of a nuclear fuel element using CFX. Buenos Aires – Argentina.
- 2014 **ENIEF 2014, Numerical Methods and their applications.**
Use of CFD to calculate pressure drops. Bariloche – Argentina.
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PUBLICATIONS

- 2014 Jiménez Díaz J.D., Lazarte A.I. and Ferreri J.C., “**Calculation of pressure drop in a preliminary design of nuclear fuel spacer grid in an integral PWR using CFD methods**”, *Mecánica Computacional Vol XXXIII*, págs. 2845-285, San Carlos de Bariloche, 23-26 Setiembre 2014.
- 2017 Jiménez Díaz J.D., Lazarte A.I.,” **Estudio en CFX de la distribución de temperatura en el tanque de calandria de la central nuclear embalse**”, *Mecánica Computacional Vol XXXV*, págs. 1765-1777, La Plata, 7-10 Noviembre 2017.
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LANGUAGES

Spanish: Native proficiency
English: IELTS score: 5.5. CEFR Level: B2.
French: Elementary proficiency

SOFTWARE

CFX.
Relap5.
Solidworks
Matlab.
Office.
