Teich, Juan Ignacio

Buenos Aires, Argentina
+54 11 6491 6389
juanignacioteich@gmail.com
25 years old
Mechanical Engineer
Argentinian and Spanish citizen

PROFESSIONAL OBJECTIVES

Continue my professional and academic career pursuing challenging projects in a PhD and applying the skills acquired through my journey so far, while developing new skills and tools for my professional and academic career.

I aim to focus on simulation and it's development, working on taking key mathematic and physics concepts into code to adress and better understand industry problems.

WORK EXPERIENCE

NUCLEOELECTRICA ARGENTINA S.A.

December 2024 – Present

Thermohydraulic Design Engineer

Nucleoeléctrica Argentina S.A.

Perform therohydraulic calculations and simulations to insure the safety and operation of the Atucha I and II Nuclear Plants.

Main tasks:

- Perfom CFD simulations to analyze key accident events.
- Research on new simulation methodologies to expand the capabilities of the Thermohydraulic Design Department.

Skills and tools:

- ANSYS Fluent, CFD, C++, Fluid Dynamics, Heat and Mass Transfer.

CONICET C S C

April 2024 – August 2024

Mechanical Engineering Thesist

Grupo de Energías Renovables - CSC - CONICET

I completed my Mechanical Engineering Thesis titled: 'Parametric study of actuator discs for wind turbine simulation' (link to thesis in spanish).

Main tasks:

- Carry a bibliographic research on actuator discs models for wind turbine simulation.
- Develop the researched models' algorithms into OpenFOAM as a new source term.
- Run simulations in CONICET's cluster TUPAC.
- Generate multiple plots and metrics for comparing the actuator disc models performance in simulations.

Skills and tools:

- OpenFOAM, Fluid Dynamics, snappyHexMesh, Python, Object Oriented Programming, Bash, Linux, Algorithms, C++, LaTeX, SSH, HPC, GitHub

STÄMM

October 2023 – April 2024

Numerical Simulations Specialist

STÄMM Biotech

Reference contact: Victoria Paes de Lima, Numeric Simulations Dept. Leader. victoria@stamm.bio

Responsabilities:

- Enhance meshing strategies for complex repetitive structures.
- Develop and run CFD simulations to validate and further improve existing in-house indirect simulation models.
- Elaborate post-processing scripts, for various types of OpenFOAM simulations and python simulation scripts.
- Formulate OOP code to further develop in-house indirect simulation model.

Skills and tools:

- OpenFOAM, Code_Saturne, Fluid Dynamics, snappyHexMesh, Salome Geometry and Meshing modules, Python, Object Oriented Programming, Bash, Linux, Algorithms, C++, LaTeX, GitHub

November 2022 – October 2023

Junior Project Engineer
Saint-Gobain Argentina

Responsabilities

- Lead strategic projects, including analyzing the company's needs for business continuity, basic project design, and implementation.

March 2020 – March 2021

Teaching Assistant in Thermodynamics course
Faculty of Engineering, University of Buenos Aires

Mechanical Engienering Department

EDUCATION

2017 – 2024

Mechanical Engineering
Faculty of Engineering, University of Buenos Aires

- Thesis - Parametric study actuator discs for wind turbine simulation.
  - CSC - CONICET - Argentina.
  - Director: Alejandro Otero, PhD.
  - Co-Director: Dimas Barile.
  - Link to thesis in spanish.

2011 – 2016

Bilingual High School
Colegio Holy Cross

SKILLS

Languages

English - fluent

- IGCSE Certificates, Cambridge University