



Julio Cesar  
Ramirez Paredes

#### Profile

Bachelor of civil engineering, expert in engineering solutions for fluid mechanics and computational fluid dynamics in challenging problems. Interest in fluid mechanics and programming languages. Outstanding learning capacity, motivation to continue learning and orientation to achieve results in my career.

#### Social Network

Mz. C1 Lt. 26  
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[Github](#)  
[Pucp](#)  
[Website](#)  
[Resume](#)

#### Languages

English   
Portuguese

#### Programming

C++   
Fortran   
Python

#### EDUCATION

- Pontificia Universidad Católica del Perú** San Miguel, PE  
*Bachelor's Degree in Civil Engineering* Jul 2019

#### WORK EXPERIENCE

- Pontificia Universidad Católica del Perú** San Miguel, PE  
*Teaching Assistant* Mar 2019 - Current
  - Fluid mechanics and hydraulics laboratory:** Experimental and theoretical knowledge of conservation laws, hydrostatics, ship stability, hydraulic jump, weirs, non-newtonian fluids, pumps and pipes.
- Hidro Mayu** Barranco, PE  
*Hydraulic equipment maintenance support* Mai 2023
  - Fluid mechanics:** Maintenance and training to teachers and students about the equipment of the Universidad de Ingenieria y Tecnologia's hydraulics laboratory
- Hidro Mayu** Chiclayo, PE  
*Hydraulic equipment maintenance support* Nov 2022
  - Fluid mechanics:** Maintenance and training to teachers and students about the equipment of the Universidad Catolica Santo Toribio de Mogrovejo's hydraulics laboratory
- Hidro Mayu** Lambayeque, PE  
*Structural equipment installation assistant* Mar 2023
  - Mechanics of materials and structural analysis:** Training to teachers about the equipment of the Universidad Nacional Pedro Ruiz Gallo's structural engineering laboratory
- Hidro Mayu** Huacho, PE  
*Hydraulic equipment maintenance support* Nov 2022
  - Fluid mechanics and open channel hydraulics:** Maintenance and training to teachers and students about the equipment of the Universidad Nacional Jose Faustino Sanchez Carrion's hydraulics laboratory
- Centro de Investigación y Tecnología del Agua** Barranco, PE  
*Research Assistant* Sep 2019 - Nov 2021
  - Urban air quality:** Numerical simulation of the navier equations for incompressible newtonian flow in air fluid in urban environments using Openfoam.
  - Dam break:** Numerical modeling of the shallow water equation for incompressible newtonian flow in dam break escenarios using Telemac-2D.
- Universidad de Ingeniería y Tecnología** Barranco, PE  
*Teaching Assistant* Aug 2019 - Nov 2021
  - Mathematics III:** Solid understanding of linear algebra and numerical methods.
- Pontificia Universidad Católica del Perú** San Miguel, PE  
*Jefe de Práctica* Mar 2019 - Jul 2020
  - Open Channel Hydraulics:** Solid understanding of channel morphology, hydraulic engineering and sediment transport.
- MJ & Asociados Water Resources Consulting** Lima, PE  
*Practicing civil engineer* Mar 2019 - Jun 2019
  - River flood:** Observation of flood zone in the Moquegua river under extreme flood condition to investigate the resilience of the infrastructure.

## SOFTWARE SKILLS

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- **Programming Languages:** C++, C, Fortran, Python, R, Javascript, Scilab, Matlab, CSS, HTML, Bash y Lisp.
- **Softwares:** Hecras, Telemac, Flo-2D, River2D, OpenFOAM, Qgis, Arcgis, Emacs, Pointwise, Tecplot, Blender, Autocad, Latex, Ubuntu, Git y Aws.
- **Typing:** Typing speed of 65 wpm - [Monkeytype](#), [Keybr](#).

## COURSES

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- Master python for data science inLearning *2021*
- Programming CFD OpenFOAM CFD Direct *2021*
- Fire modelling with OpenFOAM OpenFOAM *2020*
- OpenFOAM turbulence CFD Support *2019*
- OpenFOAM advanced CFD Support *2019*
- Open source hydraulics modelling of shallow water flow Universidad Nacional de Ingeniería  
Hydraulics Laboratory *2018*
- Autocad 2018 advanced Centro de Cómputo UNIMASTER *2018*