

### CONTACT

LinkedIn : Sandy Poncet

sandy.poncet@ifpen.fr

+33 7 89 63 31 02

### SKILLS

#### Scientific

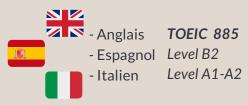
- Combustion
- Turbulence
- Modelling (CFD, CAO)
- Fluid mechanics
- Aerodynamics
- Thermodynamics
- Heat transfers

### Informatics

- Softwares: *Paraview*, GT-POWER, Fluent, CATIA, OpenFOAM, Amesim - Solvers : *CONVERGE*, Cantera, Yales2

- Programming : **Pyhton**, Fortran

#### Languages



### SANDY PONCET 3RD YEAR PHD STUDENT

3D modelling of H2 combustion in direct injection Contract with IFPEN: 2022-2025

# DIPLOMAS AND TRAINING

- Engineering degree awarded by the National Institute of Applied Sciences (INSA) of Rouen Normandy Energy and Propulsion Department | 2018 - 2022 | Speciality "Propulsion Systems" Core curriculum "Science and Technology for Engineering" | 2016 -2018 |
  - **Technical university of Riga in Latvia (Erasmus+)** |January-June 2020 | Faculty of Mechanical Engineering, Transport et Aeronautics

Scientific baccalaureate with Mathematics speciality Mention Very Well | 2016

### **EXPERIENCES**

- Engineering internship "LES approach applied to lean H2-air mixture deflagration in a semi-confined environment" IFP Énergies Nouvelles | August-December 2021
  - Study of lean hydrogen flame propagation
  - Development of a methodology for modelling the combustion of a
  - reactive mixture in a semi-confined environment
  - Application to an industrial configuration
- Engineering internship "Model reduction and optimisation of under-hood thermal management"

Stellantis (formerly PSA Peugeot Citroën) | February-July 2021

- Identification of the needs of the design teams
- Development of a model reduction methodology for engine
- dynamics under rough driving conditions
- Identification of critical operating points

#### Erasmus+ student

Technical university of Riga, Latvia | January- June 2020
-Meeting and sharing experience and culture with international students

-Improving communication skills in foreign languages (English, Spanish and Italian)

### 🔨 🚾 Au pair job

- High-Wycombe, England | June-August 2019
  - Perfecting my English
  - Taking responsibility and initiative

## HOBBIES

#### Arts

- Sewing: clothing design
- Museums and art exhibitions

#### Dance

- Salsa, Bachata
- Hip-Hop/Dancesoul
- Modern-jazz