



### **Description of the company**

AVL, world leader of powertrain engineering and facilities, is an independent company founded in 1948. With its strong network and expertise established in different parts of the world, AVL focuses on 5 main elements of powertrain engineering including internal combustion engines, hybrids vehicles, batteries, transmission and the control and command of embedded systems with investments also being made on autonomous vehicles and ADAS.

### **Job description:**

As part of our growing structure, you will be an integral part of the AVL research and development team. Your main research topic will be focused on complex analysis of combustion systems and air filling of an internal combustion engine. You will be responsible for troubleshooting complex technical issues and offer recommendations with the objective of improving the global efficiency of an internal combustion engine.

### **Key Responsibilities**

- Planning and analysis of engine test results on the client's site
- Preparation and definition of engine test programs
- Preparation and definition of measurement specifications
- Optimizing engine test methodologies
- Carry-out 0D simulations, 1D simulations with the objective of developing new models (recalibration, development and validation of the models)
- Analysis from a systematic point of view of engine test results while going through a thorough research with a solid appropriation of AVL core knowledge
- Define innovative concepts with the end result being the improvement in efficiency of simulation models and combustion systems

### **Required qualifications**

- Bachelor/Master's degree in one of the relevant fields, aeronautics/ automotive/ transportation engineering
- Strong knowledge of thermodynamics concepts
- Strong knowledge of pollutants, such as CO<sub>2</sub> and particulate formation and of the different concepts of treatment
- Previous experience on engine test beds would be ideal
- 2-5 years' experience working in the automotive sector would be a plus
- Have an analytical and critical thinking mindset
- Strong team player
- Fluent in English, knowledge of French language would be a plus

### **Key qualifications**

- Strong Knowledge of internal combustion engines and of thermodynamics concepts



### **What we offer**

- The opportunity to work in an international context with strong relationship with our team in France
- A friendly and dynamic environment with highly qualified individuals
- Working on interesting and challenging topics