Open Postdoctoral Position at LIAS (Poitiers, France) and GIPSA-lab (Grenoble, France)

We are seeking candidates for a postdoctoral position at the "Laboratoire d'Automatique et d'Informatique pour les Systèmes" (LIAS) in Poitiers, France, and "GIPSA-lab" in Grenoble, France. The project focuses on developing and comparing novel digital twin solutions for signal estimation in vehicle dynamics.

This full-time research position is for a duration of 12 to 18 months, with a competitive salary aligned with postdoctoral standards at the University of Poitiers.

Project Framework

Starting in January 2025, the *Intelligent Tire Lab* (i-TireLab) will be launched as a joint initiative between LIAS, GIPSA-lab, and Michelin (Clermont-Ferrand, France). This laboratory aims at creating data-driven scientific solutions that promote efficient, user-oriented connected mobility. Key areas include enhanced control and estimation techniques on the tire rubber manufacturing process to reduce the ecological footprint and using real-time tire property evaluations to enhance user safety.

Responsibilities

The postdoctoral researcher will be responsible for developing and comparing innovative digital twin solutions to estimate key signals and parameters on vehicle dynamics and tires, such as vehicle mass, aerodynamic drag, axle forces, and front/rear tire slip and grip potential. These estimators will be validated using both simulated and real-world data provided by Michelin.

Application Process

To apply, please email the following documents to Prof. Guillaume Mercère (guillaume.mercere@univ-poitiers.fr) and Prof. John Martinez Molina (john-jairo.martinez-molina@grenoble-inp.fr):

- A curriculum vitae (CV) detailing your educational background and a list of publications
- Two selected publications representing your research work
- A brief statement (one paragraph) explaining your interest in the position
- Transcripts of all completed coursework and obtained degrees
- Contact information for at least two references

Candidate Profile

The ideal candidate will have a strong background in automatic control, signal and parameter estimation, and optimization. Proficiency in programming is required, with expertise in Matlab and Python being essential. The candidate should demonstrate strong collaboration skills, effective communication abilities (both written and oral), and the capacity to work independently.

Application Deadline

Applications will be considered on a rolling basis until the ideal candidate is selected. The position is expected to start in January 2025, but the start date is flexible.