



L'**Institut franco-allemand de recherches de Saint-Louis (ISL)** est le pionnier de la coopération franco-allemande dans le domaine de la défense et de la sécurité. La mission de l'ISL est d'apporter des innovations technologiques aux forces de défense et de sécurité. Les recherches s'effectuent dans des disciplines multiples et à des niveaux de maturité variant entre la recherche fondamentale et le développement de prototypes préindustriels, intégrables dans des équipements opérationnels.

Proposition de Stage

Domaine de recherche : Guidance Navigation Control (GNC)

Developments for resilient navigation

Contexte

For several years now, ISL has been developing navigation techniques based on multi-sensor fusion (inertial, magnetometer, radionavigation), and has the resources and tools to develop and test solutions in environments representative of the targeted applications.

GNSS is today the leading technology for global positioning. This leading role is challenged by radio frequency interference that aim at failing the GNSS service. Therefore, it is important to develop resilient navigation. Resilient navigation includes the detection/mitigation of electronic threats as well as using alternative technologies or augmentation to GNSS.

The objective of this internship is to participate in the set up and development of a resilient navigation solution. To this end, ISL's Guidance Navigation Control (GNC) team is looking for an intern to take part in the development of a resilient navigation solution, for a period of 6 months, based in Saint-Louis for a starting date in February/March 2024.

Description du sujet de stage

You will be in charge of the following activities:

- Implementation/integration of positioning algorithms on signal processor
- Data collection in real environment
- Validation tests
- Writing of reports

Experiences and skills desired for the internship:

- You are in 3rd year telecommunication engineer, or digital signal processing engineer, electronic engineer, or a similar academic background
- You have good multidisciplinary technical knowledge
- You master the Matlab/python tool, the C/C++ language
- You have good interpersonal skills and like teamwork

The internship will take place at the Institut Franco-Allemand de Recherche de Saint Louis (ISL) within the GNC team.

The applicant is requested to send a CV (detailing the university course) and a cover letter.

Compensated internship.

Niveau : 3rd year telecommunication or electronic or digital signal processing engineer, or a similar academic background.

Durée : 6 months

Superviseur : Nabil JARDAK

Modalité de dépôt de candidature :

Le/La candidat(e) est prié(e) d'envoyer un CV (détaillant le cursus universitaire) et une lettre de motivation.
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Institut franco-allemand de recherches de Saint-Louis (ISL)

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