

Enhanced user experience and fatigue detection: eye tracking

ENSTA Bretagne



NICOLAS BAUDIN
INTERNSHIPS IN FRANCE INITIATIVE

Name of the hosting institution in France	ENSTA Bretagne
Name of the host laboratory / research team	Lab-STICC UMR 6285
Address	ENSTA Bretagne Lab-STICC 2 rue François Verny 29806 Brest Cedex 9
Web site	www.labsticc.fr
Name of the supervisor	Ali MANSOUR
Function	Professor
Email	ali.mansour@ensta-bretagne.fr
Phone number	+33 (0)2 98 34 87 88

Internship offer

Topic of the internship (title)	Enhanced user experience and fatigue detection: eye tracking			
Proposed dates of the internship*	Start	2020-10-04	End	2021-03-31

* The supervisors have indicated the dates proposed are flexible and are able to be postponed subject to COVID-19 border closures.

Scientific and academic objectives of the internship (detailed description of the internship content, work expected from the intern and expected outcomes):

Thales DMS Underwater Business Line is a leader in Underwater defense equipment for submarines and surface ships. We are producing sonar systems, constantly focusing on our customer needs. Enhancing user experience is an important part of our research and development activities. The intern will work with the sonar software development team, on new interaction mechanisms for the Human Computer Interface. He/She will contribute to test new interacting devices, such as Eye tracking system.

Name of industrial partner	Thales Underwater Systems
Role of the industrial partner in the internship project	The industrial partner has provided an outline of the research topic. Prior to the start of the internship, the scope of the research will be further detailed with the research team in ENSTA. The industrial partner will communicate results of previous internship work, to orient the scope of the research and explain expected results. During the internship there will be periodic communications and visits to follow the progress.
Main contact at the French industrial partner	Pascale Solé
Email of contact at French industrial partner	pascale.sole@fr.thalesgroup.com
Main contact at the French industrial partner's branch in Australia	Tim Cain
Email	tim.cain@thalesgroup.com.au
Name of the Australian partner institution	Flinders University
Name of lab/department/team involved in the collaboration at the Australian partner institution	Machine learning, reinforcement learning, and computer vision
Main contact in the Australian partner institution	Tony Kyriacou
Function of the main contact in the Australian partner institution	Defence Partnerships Director
Email address of the main contact in the Australian partner institution	tony.kyriacou@flinders.edu.au
Outside of this ongoing collaboration, will applications coming from students of other eligible Australian universities be considered by the hosting institution in France?	No

Expected profile of applicant

Level of study	Master, Bachelor with Honours
Discipline	Electrical engineering or computer science
Required qualities, knowledge and skills	Technical skills: Linux, C/C++, Windows 10, Unity 3D, Java 8. Curiosity and appetite for innovation will help a lot to complete all the tasks of this internship
Other specific eligibility criteria	The candidate must be Australian citizen