Artificial Intelligence

Université Polytechnique Hauts-de-France

FRANCE EXCELLENCE NICOLAS BAUDIN

Name of the hosting institution in France	Université Polytechnique Hauts-de-France
Name of the host laboratory / research team	IEMN UMR – CNRS 8520 Institut d'Electronique, de Microélectronique et de Nanotechnologie
Address	IEMN UMR – CNRS 8520, Université Polytechnique Hauts-de-France, Campus Mont Houy, 59313 VALENCIENNES Cedex 9
Name of the supervisor	Dr. Iyad Dayoub
Function	Full Professor in Telecommunications
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Internship offer

Topic of the internship (title)	Artificial Intelligence (AI) for wireless communications			
Proposed dates of the internship	**Start**	02/09/2024	**End**	20/12/2024

Scientific and academic objectives of the internship:

Given the transformative possibilities presented by artificial intelligence (AI) in the realm of wireless communications, the proposed research topic aims to fully leverage and amplify the capabilities of this technology. The potential of AI in this context is extensive, encompassing various domains within future wireless communications such as Intelligent Transportation Systems (ITS), healthcare accessibility and telemedicine. The collaboration facilitated by the bridging of two universities will be in harmony with the inherent potential that AI holds for wireless communications. A Master's student will delve into the critical challenges entailed in integrating AI into the evolution of 6G wireless networks. Within this AI-centric framework, our research program will actively delve into the development of novel AI-driven methodologies and the exploration of pioneering applications that fully exploit AI's potential within upcoming wireless communication systems

Industrial partner

Does the project involve a French industry partner?	No
Name	/
Role of the industrial partner in the internship project	/
Main contact	/
Email	/
Main contact industrial partner's branch in Australia	/
Email	/

Australian partner

Is the internship project proposed in the framework of an existing collaboration with an Australian partner university?	No
Name of the Australian partner institution	/
Lab/department/team involved in the collaboration	/
Main contact in the Australian partner institution	/
Function	/
Email	/
Outside of this ongoing collaboration, will students from other Australian universities be considered by the hosting institution in France?	[Select Yes/No]

Expected profile of applicant

Level of study	Master
Discipline	Computer Engineering
Prerequisite knowledge, qualities and skills	Applicants must have a background in computer engineering. The candidate must be autonomous and have a rigorous scientific approach.
Language of Internship	English
Other specific eligibility criteria	/