Pr Cédric BUCHE

5000 Adélaide, Australia

- @ buche@enib.fr
- @ cedric.buche@pacific.naval-group.com
- ♠ http://web.enib.fr/~buche
- $\bigcirc +61 (0)483 343 787$



CURRICULUM VITÆ

Professor - ENIB / R&D Director (CTO) Naval Group Pacific

HIGHER EDUCATION		
2012	Habilitation ¹ in Computer Science, Université de Bretagne Occidentale (UBO), France	
2005	PhD in Computer Science, UBO, France	
2002	MSc in Computer Science, Université Rennes I, France	
2002	Engineer, National Engineering School (ENIB), France	

EXPERIENCE		
2023 - present	R&D Director (CTO), Naval Group Pacific	
2018 - present	Professor, ENIB	
2021 - 2023	CNRS delegation, IRL 2010, Australia	
2018 - 2020	Professor (by courtesy), University of Miami.	
2007 - 2018	Associate professor, ENIB.	
2006 - 2007	Assistant associate professor, UBO	
2005 - 2006	Assistant associate professor, ENIB	

RESEARCH

Topics: Artificial Intelligence, Virtual Reality, Machine Learning, Human Factors, Robotic

Applications: Video games, Virtual Environment for Learning, Maritime

Supervisions: 19 PhD + 30 MSc + 5 engineers + 2 Post-doc

Management: Research teams leader (10 staff members) and programs leader (50 staff members)

TEACHING

Main: Master 2 program leader during 10 years (computer science)

	COMPETITIONS / AWARDS
2023	$oldsymbol{1}^{st} \ \mathbf{RoboCup@Home^2}$
2022	$1^{st} \; \mathbf{RoboCup@Home}$
2022	Elected "French of the year in Australia"
2021	3^{rd} RoboCup@Home
2020	1^{st} RoboCup@Home Education
2017	Finalist Angry Birds AI - IJCAI 2017
2016	Finalist Angry Birds AI - IJCAI 2016
2015	1^{st} Angry Birds AI - IJCAI 2015
2014	Semi-Finalist Angry Birds AI - ECAI 2014
2013	Finalist Angry Birds AI - IJCAI 2013
2013	1^{st} Man vs Machine Challenge - IJCAI 2013

 $^{1. \} Highest \ degree \ in \ French \ academic \ education, \ awarded \ after \ passing \ the \ tenure \ process, \ qualifies \ for \ full \ professorship$

^{2. ==} world champion in social robotics

CONTRACTS

Institutional Industrial EU, ANR, AID (defense), USA funding, FUI (≈ 500 K €+ PhD salaries)

CIFRE, Expertise, Contract (≈ 1M €+ PhD salaries) : ArianeGroup, Thales, Segula, Ericsson, Naval Group

PATENT

2021

"Infobuna" : software for desease detection and grading of coffee using photos (num IDDN.FR.001.170002.000.S.P.2021.000.2100)

MAIN PUBLICATIONS

Rank A: Delamarre A., Shernoff E., Buche C., Frazier S., Gabbard J. and Lisetti C. (2021).

The Interactive Virtual Training for Teachers (IVT-T) to Practice Classroom Behavior

Management. International Journal of Human - Computer Studies. 152.

Rank A: Cazorla R., Pionel L., Papadakis P. and Buche C. (2021). Bottleneck Identification to

Semantic Segmentation of Industrial 3D Point Cloud Scene via Deep Learning. IInter-

national Joint Conference on Artificial Intelligence (IJCAI). pages 4877-4878

Rank A: Delamarre, A., Buche C. and Lisetti C. (2021). Modeling Emotions for Training in

Immersive Simulations (METIS): a Cross-Platform Virtual Classroom Study. IIEEE

International Symposium on Mixed and Augmented Reality (ISMAR). pages 78-83

Rank B: Cazorla R., Pionel L., Papadakis P. and Buche C. (2022). Reducing domain shift in

synthetic data augmentation for semantic segmentation of 3D point clouds. IIEEE In-

ternational Conference on Systems, Man, and Cybernetics (SMC).

Rank B: Wallelign S., Polceanu M., Jemal T. and Buche C. (2019). Coffee Grading with Convolu-

tional Neural Networks using Small Datasets with High Variance. International Conference on Computer Graphics, Visualization and Computer Vision (WSCG), pages 113-

120

Jury

Habilitation:

Reviewer (1), Member (1)

PhD:

Reviewer (6), President (4), Member (14)

MAIN PRESS

2022: France Inter interview "la matinale" on interactive robotic

2021: Magazine "l'Usine Nouvelle" published an interview on my research activities

2018: Magazine "Planet Robots" published an article on my research activities (2 pages)