

Elections 2023 aux Conseils Scientifiques d'Institut

Conseil Scientifique de l'INS2I • Collège B1

Ninon BURGOS, Institut du Cerveau

Hôpital de la Pitié-Salpêtrière, 47 boulevard de l'hôpital, 75013 Paris, France
✉ ninon.burgos@cnr.fr • ☎ 01 57 27 43 48 • 🏠 <https://ninonburgos.com>

Research Topics

My research focuses on the processing and analysis of medical images, mainly image synthesis, on the use of images to guide diagnosis, and on the application of these methods to the clinic.

Education

Habilitation à Diriger des Recherches

SORBONNE UNIVERSITÉ

Paris, France

2022

PhD in Medical and Biomedical Imaging

UNIVERSITY COLLEGE LONDON

London, UK

2016

MSc in Biomedical Engineering

IMPERIAL COLLEGE LONDON

London, UK

2012

Diplôme d'Ingénieur

ÉCOLE NATIONALE SUPÉRIEURE D'ÉLECTRONIQUE ET DE SES APPLICATIONS (ENSEA)

Cergy, France

2012

Academic Positions

PR[AI]RIE junior fellow

PARIS ARTIFICIAL INTELLIGENCE RESEARCH INSTITUTE (PR[AI]RIE)

Paris, France

2019 – present

CNRS researcher (CRCN)

INSTITUT DU CERVEAU – ARAMIS LAB (SORBONNE UNIVERSITÉ, CNRS UMR 7225, INRIA, INSERM U1127, AP-HP)

Paris, France

2018 – present

Postdoctoral researcher

INRIA/INSTITUT DU CERVEAU ET DE LA MOELLE ÉPINIÈRE – ARAMIS LAB (INSERM U1127, CNRS UMR 7225, SORBONNE UNIVERSITÉ)

Paris, France

2017 – 2018

Postdoctoral researcher

CENTRE FOR MEDICAL IMAGE COMPUTING, UNIVERSITY COLLEGE LONDON

London, UK

2016

Research assistant

CENTRE FOR MEDICAL IMAGE COMPUTING, UNIVERSITY COLLEGE LONDON

London, UK

2012 – 2016

Honours & Awards (selection)

2019 **ERCIM Cor Baayen Young Researcher Award**, <https://www.ercim.eu/human-capital/cor-baayen-award>

Publications

28	International journal articles	9 as first/last author, 8 as second/second-last author
1	Edited book	with David Svoboda
4	Edited conference proceedings	2 as main editor
4	Book chapters	2 as main author
19	Conferences with full-length peer-reviewed proceedings	13 as first/last author, 2 as second author
36	Conference abstracts	9 as first/last author, 10 as second/second-last author

Supervision of Research Activities

5	PhD students	3 completed, 2 ongoing
5	Master students	3 completed, 2 ongoing
7	Developers working on two open-source software platforms (Clinica & ClinicaDL)	3 ongoing

Open-source Software

Clinica	<ul style="list-style-type: none">Open-source software platform for clinical neuroimaging research studiesRole: Management of the project and of the developers	www.clinica.run https://github.com/aramis-lab/clinica
ClinicaDL	<ul style="list-style-type: none">Open-source deep learning software for reproducible neuroimaging processingRole: Management of the project and of the developers	https://github.com/aramis-lab/clinicaDL

Funding

2019 – 2023	PR[AI]RIE Springboard Chair , ‘Investissements d’avenir’ programme from the French government under management of Agence Nationale de la Recherche (ANR-19-P3IA-0001)	185k €
2017 – 2018	PRESTIGE Postdoctoral Research Fellowship , Campus France and the Marie Curie Actions	30k €

Invited Presentations (selection)

Colloque Français d’Intelligence Artificielle en Imagerie Biomédicale (IABM 2023)	Mar 2023 – Paris, France
SPIE Medical Imaging Conference	Feb 2023 – San Diego, USA
AI4Health Winter School	Jan 2022 – Virtual
Mathematics and Image Analysis - MIA’21	Jan 2021 – Virtual
3e colloque sur l’imagerie médicale à l’heure de l’intelligence artificielle	Oct 2020 – Paris, France
MaDICS Symposium	June 2019 – Rennes, France
Neuro OpenScience Workshop	Jan 2019 – Paris, France
Workshop on Machine Learning in Radiology	Nov 2018 – Lausanne, Switzerland
Annual Congress of the European Association of Nuclear Medicine	Oct 2017 – Vienna, Austria

Other Professional Activities

EDITORSHIP

Book	Burgos, N., Svoboda, D., eds.: Biomedical Image Synthesis Simulation: Methods and Applications, MICCAI Book series, Elsevier, 2022. https://doi.org/10.1016/C2020-0-01250-8
Conferences	MIDL 2024 Conference Chair, MIDL Technical Committee (2022,2023), SPIE Medical Imaging: Image Processing Programme Committee (2023), SASHIMI Programme Chair (2019, 2020) and Co-Chair (2018, 2021)

REVIEW

Journals (selection)	Medical Image Analysis; IEEE T. Medical Imaging; IEEE T. Pattern Analysis and Machine Intelligence; Computer Methods and Programs in Biomedicine; PLOS ONE; Scientific Reports; Artificial Intelligence Review; NeuroImage
Conferences	MICCAI, ISBI, MIDL, SASHIMI, OHBM, GRETSI
Grants	ERC Advanced Grants, Luxembourg National Research Fund, National Science Centre Poland, DIM ELICIT, Alzheimer’s Society, ANR JCJC, Netherlands Organisation for Scientific Research Vidi-programme

PARTICIPATION TO JURIES

- ×1 **Concours CRCN/IFSP**, Inria Paris centre (2020)
- ×3 **PhD juries**, Louise Guillon (2023), Lydia Chougar (2022), Gauthier Dot (2022)
- ×3 **Comité de suivi de thèse**, Francesco Galati (2022-), Camille Ruppli (2022-), Charlotte Godard (2021-)

WORKSHOP, SCHOOL & TUTORIAL ORGANISATION

Since 2021	Scientific & Organisation Committees , AI4Health Summer School (https://ai4healthschool.org)	Paris, France
2023	Organiser , MICCAI 2023 Tutorial on Reproducibility (http://miccai2023-reproducibility-tutorial.github.io)	Vancouver, Canada
2021	Programme & Organisation committees , Simulation and Synthesis in Medical Imaging (SASHIMI) 2021, a satellite workshop of MICCAI 2021 (https://2023.sashimi-workshop.org/previous_editions)	Strasbourg, France (virtual)
2020	Programme Chair & Organisation Committee , SASHIMI 2020	Lima, Peru (virtual)
2020	Organisation Committee , Hands-on Workshop on Machine Learning Applied to Medical Imaging	Paris, France
2019	Programme Chair & Organisation Committee , SASHIMI 2019	Shenzhen, China
2018	Programme & Organisation Committees , SASHIMI 2018	Granada, Spain

TEACHING

Since 2022	DU Intelligence artificielle IA en santé , Deep Learning for Medical Imaging	Université de Lille
Since 2021	CENIR courses , Deep Learning for Medical Imaging	Paris Brain Institute
2021, 2022	AI4Health Winter School , Practical session on Deep Learning for Medical Imaging	Virtual
Since 2020	DU Intelligence artificielle IA appliquée en santé , Deep Learning for Medical Imaging	Université de Paris
2020, 2022	DIU Neuroradiologie diagnostique et thérapeutique , Deep Learning for Neuro Imaging	Sorbonne Université