Hao-Ting Wang, PhD

Canadian Neuroanalytics Scholar in Deep Learning and Cognitive Neuroscience

Centre de recherche de l'Institut universitaire de gériatrie de Montréal (CRIUGM)
Montréal, Quebéc, Canada

RESEARCH POSITIONS

Postdoctoral Researcher — Sept. 2021 – Present
Centre de recherche de l'Institut universitaire de gériatrie de Montréal (CRIUGM) — *Montréal, QC, Canada*

Principal Investigator: Prof Pierre Bellec
Software for neuroimaging and neurodegeneration biomarker discovery.

Research Fellow — Sept. 2019 – Aug. 2021
Sackler Centre for Consciousness Science, University of Sussex — *Brighton, United Kingdom*

Principal Investigators: Prof Hugo Critchley, Prof Sarah Garfinkle
Cognitive processes in psychiatric conditions with neuroimaging and physiology measures.

Postdoctoral Research Associate — Nov. 2018 – Aug. 2019
University of York — *York, United Kingdom*

Principal Investigator: Prof Jonathan Smallwood
Working on the European Research Council funded project—Wandering Minds

Research Administrator — Oct. 2015 – Oct. 2018
University of York — *York, United Kingdom*

Principal Investigators: Prof Jonathan Smallwood and Prof Elizabeth Jefferies
Experiment design, project management, neuroimaging analysis pipeline development

EDUCATION

PhD in Cognitive Neuroscience and Neuroimaging — Sept. 2015 – Dec. 2018
University of York — *York, United Kingdom*

Supervisors: Prof Jonathan Smallwood and Prof Elizabeth Jefferies
Thesis: "*Towards an Ontology of Ongoing Thought*"

Master of Research in Psychology — Sept. 2013 – Sept. 2014
University of York — *York, United Kingdom*

BSc in Psychology — Sept. 2009 – June 2013
National Chengchi University — *Taipei, Taiwan*

AWARDS AND SCHOLARSHIPS

Scholarships

2024 - 2026 Canadian Neuroanalytics Scholars Program. AB, Canada. **(CAD$140,000)**
2022 - 2024 Institut de valorisation des données (IVADO): Postdoctoral scholarship. QC, Canada. **(CAD$70,000)**
2022 UNIQUE: UNIQUE Excellence Scholarship. QC, Canada. (CAD$20,000; declined)
2019 - 2021 Sackler Foundation: postdoctoral research fellowship. Brighton, United Kingdom **(£33,199 per annum)**

Awards

2023 Neuro-Irv and Helga Cooper Foundation Open Science Prizes: Canadian Trainee Prize. **(CAD$5,000)**
2017 Guarantors of Brain Travel Award: Machine Learning Summer School. Tübingen, Germany (£600)
2016 The Neuro Bureau Travel Award: Brainhack Vienna. Vienna, Austria (USD$500)
2014 University of York Department Summer Bursary Award. York, United Kingdom (£1000)

RECENT PUBLICATIONS

Peer-Reviewed Journals

[1] H.-T. Wang, N. Clarke, Q. Dessain, F. Paugam, and P. Bellec, "Nilearn and Big Data Facilitates Transdiagnostic Brain Biomarkers," *Biological Psychiatry*, vol. 95, no. 10, p. S22, May 2024, (Accessed 2024-10-21).

[2] H.-T. Wang, S. L. Meisler, H. Sharmarke, N. Clarke, N. Gensollen, C. J. Markiewicz, F. Paugam, B. Thirion, and P. Bellec, "Continuous evaluation of denoising strategies in resting-state fMRI connectivity using fMRIPrep and Nilearn," *PLOS Computational Biology*, vol. 20, no. 3, pp. 1–32, Mar. 2024.

[3] H.-T. Wang, J. Smallwood, J. Mourao-Miranda, C. H. Xia, T. D. Satterthwaite, D. S. Bassett, and D. Bzdok, "Finding the needle in a high-dimensional haystack: Canonical correlation analysis for neuroscientists," *NeuroImage*, vol. 216, p. 116745, Aug. 2020.

[4] H.-T. Wang, N. S. P. Ho, D. Bzdok, B. C. Bernhardt, D. S. Margulies, E. Jefferies, and J. Smallwood, "Neurocognitive patterns dissociating semantic processing from executive control are linked to more detailed off-task mental time travel," *Scientific Reports*, vol. 10, no. 1, p. 11904, Jul. 2020.

[5] H.-T. Wang, D. Bzdok, D. S. Margulies, R. C. Craddock, M. P. Milham, E. Jefferies, and J. Smallwood, "Patterns of thought: Population variation in the associations between large-scale network organisation and self-reported experiences at rest," *NeuroImage*, vol. 176, no. 1, pp. 518–527, Aug. 2018.

[6] H.-T. Wang, G. L. Poerio, C. E. Murphy, D. Bzdok, E. Jefferies, and J. Smallwood, "Dimensions of Experience: Exploring the Ontology of the Wandering Mind," *Psychological Science*, vol. 29, no. 1, pp. 56–71, Nov. 2018.

[7] R. S. Wallace, B. Mckeown, I. Goodall-Halliwell, L. Chitiz, P. Forest, T. Karapanagiotidis, B. Mulholland, A. G. Turnbull, T. Vanderwal, S. Hardikar, T. G. Alam, B. Bernhardt, H.-T. Wang, W. Strawson, M. Milham, T. Xu, D. Margulies, G. L. Poerio, E. Jefferies, J. I. Skipper, J. Wammes, R. Leech, and J. Smallwood, "Mapping patterns of thought onto brain activity during movie-watching," *eLife*, vol. 13, Oct. 2024, (Accessed 2024-10-21).

[8] B. Mckeown, W. H. Strawson, M. Zhang, A. Turnbull, D. Konu, T. Karapanagiotidis, H.-T. Wang, R. Leech, T. Xu, S. Hardikar, B. Bernhardt, D. Margulies, E. Jefferies, J. Wammes, and J. Smallwood, "Experience sampling reveals the role that covert goal states play in task-relevant behavior," *Scientific Reports*, vol. 13, no. 1, p. 21710, Dec. 2023, (Accessed 2024-10-21).

[9] A. Nikolaidis, M. Mancini, T. Auer, K. L. Bottenhorn, E. Alonso-Ortiz, G. Gonzalez-Escamilla, S. Valk, T. Glatard, M. S. Atay, J. M. M. Bayer, J. Bijsterbosch, J. Algermissen, N. Beck, P. Bermudez, I. P. Bilgin, S. Bollmann, C. Bradley, M. E. J. Campbell, B. Caron, O. Civier, L. P. Coelho, S. E. Damaty, S. Das, M. Dugré, E. Earl, S. Evas, N. L. Fischer, D. F. Yap, K. G. Garner, R. Gau, G. Ganis, D. G. E. Gomes, M. Grignard, S. Guay, O. F. Gulban, S. Hamburg, Y. O. Halchenko, V. Hayot-Sasson, D. L. Holford, L. Huber, M. Illanes, T. Johnstone, A. Kalyani, K. Kashyap, H. Ke, I. Khormi, G. Kiar, V. Kovi ć, T. Kuehn, A. Kumar, X. Lecours-Boucher, M. Lührs, R. Luke, C. Madjar, S. M. L, C. Markeweicz, P. A. Martinez, A. McCarroll, L. Michel, S. Moia, A. Narayanan, G. Niso, E. A. O'Brien, K. Oudyk, F. Paugam, Y. G. Pavlov, J.-B. Poline, B. A. Poser, C. Provins, P. R. Raamana, P. Rioux, D. Romero-Bascones, E. Sareen, A. Schettino, A. Shaw, T. Shaw, C. A. Smout, A. Šoškié, J. Stone, S. J. Styles, R. Sullivan, N. Sunami, S. Sundaray, J. W. Rou, D. T. Thuy, S. Tourbier, S. Urch, A. d. l. Vega, N. Viswarupan, A. Wagner, L. Walger, H.-T. Wang, F. T. Woon, D. White, C. Wiggins, W. Woods, Y.-F. Yang, K. Zaytseva, J. D. Zhu, and M. P. Zwiers, "Proceedings of the OHBM Brainhack 2021," *Aperture Neuro*, vol. 3, pp. 1–20, Mar. 2023, publisher: Organization for Human Brain Mapping. (Accessed 2024-10-21).

[10] D. Lussier, N. Clarke, H.-T. Wang, A. Boré, L. Tetrel, S. Duchesne, G. A. Devenyi, M. M. Chakravarty, M. Descoteaux, R. A. Dixon, A. Badhwar, and P. Bellec, "Standardized preprocessed derivatives for the Comprehensive Assessment of Neurodegeneration and Dementia (COMPASS-ND) Study," *Alzheimer's & Dementia*, vol. 18, no. S5, p. e065619, 2022, (Accessed 2023-11-20).

[11] W. H. Strawson, H.-T. Wang, L. Quadt, M. Sherman, D. E. Larsson, G. Davies, B. L. Mckeown, M. Silva, S. Fielding-Smith, A.-M. Jones, and others, "Voice hearing in borderline personality disorder across perceptual, subjective, and neural dimensions," *International Journal of Neuropsychopharmacology*, vol. 25, no. 5, pp. 375–386, 2022, publisher: Oxford University Press US.

[12] M. Del Río, C. Racey, Z. Ren, J. Qiu, H.-T. Wang, and J. Ward, "Higher Sensory Sensitivity is Linked to Greater Expansion Amongst Functional Connectivity Gradients," *Journal of Autism and Developmental Disorders*, pp. 1–19, 2022, publisher: Springer.

[13] M. T. Sherman, H.-T. Wang, S. N. Garfinkel, and H. D. Critchley, "The Cardiac Timing Toolbox (CaTT): Testing for physiologically plausible effects of cardiac timing on behaviour," *Biological Psychology*, vol. 170, p. 108291, 2022, publisher: Elsevier.

[14] J. Smallwood, A. Turnbull, H.-T. Wang, N. S. Ho, G. L. Poerio, T. Karapanagiotidis, D. Konu, B. Mckeown, M. Zhang, C. Murphy, D. Vatansever, D. Bzdok, M. Konishi, R. Leech, P. Seli, J. W. Schooler, B. Bernhardt, D. S. Margulies, and E. Jefferies, "The neural correlates of ongoing conscious thought," *iScience*, vol. 24, no. 3, p. 102132, 2021.

[15] R. Gau and B. Community, "Brainhack: developing a culture of open, inclusive, community-driven neuroscience," *Neuron*, vol. 109, pp. 1769–1775, 2021.

[16] N. S. P. Ho, D. Baker, T. Karapanagiotidis, P. Seli, H. T. Wang, R. Leech, B. Bernhardt, D. Margulies, E. Jefferies, and J. Smallwood, "Missing the forest because of the trees: slower alternations during binocular rivalry are associated with lower levels of visual detail during ongoing thought," *Neuroscience of Consciousness*, vol. 2020, no. 1, Jan. 2020.

[17] A. Turnbull, T. Karapanagiotidis, H.-T. Wang, B. C. Bernhardt, R. Leech, D. Margulies, J. Schooler, E. Jefferies, and J. Smallwood, "Reductions in task positive neural systems occur with the passage of time and are associated with changes in ongoing thought," *Scientific Reports*, vol. 10, no. 1, p. 9912, Dec. 2020.

[18] B. Mckeown, W. H. Strawson, H.-T. Wang, T. Karapanagiotidis, R. Vos de Wael, O. Benkarim, A. Turnbull, D. Margulies, E. Jefferies, C. McCall, B. Bernhardt, and J. Smallwood, "The relationship between individual variation in macroscale functional gradients and distinct aspects of ongoing thought," *NeuroImage*, vol. 220, p. 117072, Oct. 2020.

[19] D. Konu, A. Turnbull, T. Karapanagiotidis, H.-T. Wang, L. R. Brown, E. Jefferies, and J. Smallwood, "A role for the ventromedial prefrontal cortex in self-generated episodic social cognition," *NeuroImage*, vol. 218, p. 116977, Sep. 2020.

[20] A. Turnbull, H. T. Wang, C. Murphy, N. S. P. Ho, X. Wang, M. Sormaz, T. Karapanagiotidis, R. M. Leech, B. Bernhardt, D. S. Margulies, D. Vatansever, E. Jefferies, and J. Smallwood, "Left dorsolateral prefrontal cortex supports context-dependent prioritisation of off-task thought," *Nature Communications*, vol. 10, no. 1, Dec. 2019.

[21] C. Murphy, G. Poerio, M. Sormaz, H.-T. Wang, D. Vatansever, M. Allen, D. S. Margulies, E. Jefferies, and J. Smallwood, "Hello, is that me you are looking for? A re-examination of the role of the DMN in social and self relevant aspects of off-task thought," *PLOS ONE*, vol. 14, no. 11, p. e0216182, Nov. 2019.

[22] C. Murphy, H.-T. Wang, D. Konu, R. Lowndes, D. S. Margulies, E. Jefferies, and J. Smallwood, "Modes of operation: A topographic neural gradient supporting stimulus dependent and independent cognition," *NeuroImage*, vol. 186, pp. 487–496, Feb. 2019.

[23] A. Turnbull, H.-T. Wang, J. W. Schooler, E. Jefferies, D. S. Margulies, and J. Smallwood, "The ebb and flow of attention: Between-subject variation in intrinsic connectivity and cognition associated with the dynamics of ongoing experience," *NeuroImage*, vol. 185, pp. 286–299, Jan. 2019.

[24] L. M. Martinon, L. M. Riby, G. Poerio, H.-T. Wang, E. Jefferies, and J. Smallwood, "Patterns of on-task thought in older age are associated with changes in functional connectivity between temporal and prefrontal regions," *Brain and Cognition*, vol. 132, pp. 118–128, 2019.

[25] K. Krieger-Redwood, H.-T. Wang, G. Poerio, L. M. Martinon, L. M. Riby, J. Smallwood, and E. Jefferies, "Reduced semantic control in older adults is linked to intrinsic dmn connectivity," *Neuropsychologia*, vol. 132, p. 107133, 2019.

[26] M. Sormaz, C. Murphy, H.-t. Wang, M. Hymers, T. Karapanagiotidis, G. Poerio, D. S. Margulies, E. Jefferies, and J. Smallwood, "Default mode network can support the level of detail in experience during active task states," *Proceedings of the National Academy of Sciences*, vol. 115, no. 37, pp. 9318–9323, Sep. 2018.

[27] C. Murphy, E. Jefferies, S.-A. Rueschemeyer, M. Sormaz, H.-t. Wang, D. S. Margulies, and J. Smallwood, "Distant from input: Evidence of regions within the default mode network supporting perceptually-decoupled and conceptually-guided cognition," *NeuroImage*, vol. 171, no. 2018, pp. 393–401, May 2018.

[28] M. Villena-Gonzalez, H. ting Wang, M. Sormaz, G. Mollo, D. S. Margulies, E. A. Jefferies, and J. Smallwood, "Individual variation in the propensity for prospective thought is associated with functional integration between visual and retrosplenial cortex," *Cortex*, vol. 99, pp. 224–234, 2018.

[29] G. L. Poerio, M. Sormaz, H.-T. Wang, D. S. Margulies, E. Jefferies, and J. Smallwood, "The role of the default mode network in component processes underlying the wandering mind," *Social Cognitive and Affective Neuroscience*, vol. 104, no. 7, pp. 6430–5, Mar. 2017.

[30] D. Vatansever, D. Bzdok, H.-T. Wang, G. Mollo, M. Sormaz, C. E. Murphy, T. Karapanagiotidis, J. Smallwood, and E. Jefferies, "Varieties of semantic cognition revealed through simultaneous decomposition of intrinsic brain connectivity and behaviour," *NeuroImage*, vol. 158, no. 1, pp. 1–11, 2017.

[31] J. G. Sanders, H.-T. Wang, J. Schooler, and J. Smallwood, "Can i get me out of my head? exploring strategies for controlling the self-referential aspects of the mind-wandering state during reading," *Quarterly Journal of Experimental Psychology*, vol. 70, no. 6, pp. 1053–1062, 2017.

[32] J. Smallwood, T. Karapanagiotidis, F. Ruby, B. Medea, I. de Caso, M. Konishi, H.-T. Wang, G. Hallam, D. S. Margulies, and E. Jefferies, "Representing Representation: Integration between the Temporal Lobe and the Posterior Cingulate Influences the Content and Form of Spontaneous Thought," *PLOS ONE*, vol. 11, no. 4, p. e0152272, Apr. 2016.

Conference Posters

[1] H.-T. Wang, F. Paugam, N. Farrugia, and P. Bellec, "A scaling study of self-supervised auto-regressive modelling of fMRI time series and performance on downstream sex prediction in the UK biobank sample." Boston, MA, USA: Cognitive Computational Neuroscience, August 2024.

[2] H.-T. Wang, S. L. Meisler, H. Sharmarke, N. Clarke, N. Gensollen, C. J. Markiewicz, F. Paugam, B. Thirion, and P. Bellec, "A reproducible benchmark of fMRI denoising strategies in fMRIPrep and Nilearn." Montreal, QC,Canada: OHBM, July 2023.

[3] H.-T. Wang, S. L. Meisler, H. Sharmarke, N. Clarke, N. Gensollen, C. J. Markiewicz, F. Paugam, B. Thirion, and P. Bellec, "A reproducible benchmark of fMRI denoising strategies in fMRIPrep and Nilearn." Pavillon Alphonse-Desjardins, Université Laval, Québec, Quebec: Journée scientifique du RBIQ, May 2023.

[4] H.-T. Wang, N. Clarke, S. L. Meisler, H. Sharmarke, N. Gensollen, C. J. Markiewicz, F. Paugam, B. Thirion, and P. Bellec, "A reproducible benchmark of fMRI denoising strategies in fMRIPrep and Nilearn." Montreal, Canada: IVADO, October 2022.

[5] H.-T. Wang, S. L. Meisler, H. Sharmarke, N. Gensollen, C. J. Markiewicz, F. Paugam, B. Thirion, and P. Bellec, "Impact of confound removal strategies on functional connectivity generated from fmriprep preprocessed data." Glasgow, United Kingdom: OHBM, June 2022.

[6] H.-T. Wang, C. Rae, G. Davies, C. Gould van Praag, A. Seth, H. Critchley, and S. Garfinkel, "Insula hypoactivation is associated with dissociative experiences." Virtual Conference: OHBM, June 2020.

[7] H.-T. Wang, N. S. Ping Ho, D. Bzdok, B. C. Bernhardt, D. S. Margulies, E. Jefferies, and J. Smallwood, "Neurocognitive patterns dissociating semantic processing from executive control are linked to more detailed off-task mental time travel." Seattle, USA: Neurohackademy, August 2019.

[8] H.-T. Wang, N. S. Ping Ho, D. Bzdok, B. C. Bernhardt, D. S. Margulies, E. Jefferies, and J. Smallwood, "Neurocognitive patterns dissociating semantic processing from executive control are linked to more detailed off-task mental time travel." Rome, Italy: OHBM, June 2019.

[9] H.-T. Wang, E. Jefferies, and J. Smallwood, "Inhibition of prior mental content contributes to content representation of on-going thoughts." Montreal, Canada: Resting State Brain Connectivity, Sep. 2018.

[10] H.-T. Wang, D. Bzdok, D. S. Margulies, R. C. Craddock, M. P. Milham, E. Jefferies, and J. Smallwood, "Decomposing self-reports of experience at rest with brain connectivity reveals links to intelligence." Singapore: OHBM, June 2018.

[11] H.-T. Wang, G. L. Poerio, C. Murphy, D. Bzdok, E. Jefferies, and J. Smallwood, "Dimensions of experience: Exploring the heterogeneity of the wandering mind." Amsterdam, Netherlands: 13th International Conference for Cognitive Neuroscience, Aug. 2017.

[12] H.-T. Wang, G. L. Poerio, C. Murphy, D. Bzdok, E. Jefferies, and J. Smallwood, "Dimensions of experience: Exploring the heterogeneity of the wandering mind." Tübingen, Germany: Machine Learning Summer School, Jun. 2017.

[13] H.-T. Wang, D. Bzdok, C. Murphy, D. Vatansever, G. L. Poerio, J. Smallwood, and E. Jefferies, "Component processes and the wandering mind: Links between spontaneous thought contents, task performance and resting state brain connectivity." Vienna, Austria: Resting State Brain Connectivity, Sep. 2016.

TALKS

2024 Symposim Speaker. Big Data in Psychiatry: Does It Solve the Reproducibility Problem? 2024 Society of Biological Psychiatry. Austin, TX, USA.
2024 Invited Speaker. Continuous Evaluation of Denoising Strategies in fMRI Using fMRIPrep and Nilearn. COMPASS Neuro-AI seminar series.
2023 Canadian Trainee Prize recipient talk. 5th Annual Neuro Open Science in Action Symposium. Montreal, QC, Canada.
2023 Hackathon and Early Career Development. OHBM 2023. Montreal, QC, Canada.
2023 Fantastic open source projects and how to find them. UNIQUE Student Symposium 2023. Montreal, QC, Canada.
2023 A reproducible benchmark of fMRI denoising strategies in fMRIPrep and Nilearn. Q-BIN Science Day. Quebec City, QC, Canada. 2023
2022 load_confounds. Neuroimaging in Montreal. Montreal, QC, Canada.
2021 Panel speaker on neuroinformatics at University of Texas Brainstorms
2021 Panel speaker on academic career at MAIN 2021
2021 Panel speaker at SciPy2021 Biology and Neuroscience mini-symposium
2021 Canonical correlation analysis application in neuroimaging data, Queen's University, Kingston, Canada
2019 Recent trend in resting-state functional connectivity, University of Sussex, Brighton, UK
2019 Data simulation workshop, University of York, York, UK
2019 Multivariate mapping of functional brain and behaviour, Child Mind Institute, New York, USA
2018 Small steps to reproducible science, University of York, York, UK

PROFESSIONAL SERVICE

Committees

Oct. 2022 – June 2023	Brainhack school organiser, Montreal, QC, Canada
Oct. 2021 – Sep. 2022	Hackathon Chair, Open Science special interest group, OHBM, Glasgow, UK
Mar. 2020 – Aug. 2021	ECR representative, Sussex Neuroscience Steering Committee, University of Sussex
Jun. 2021	OHBM Sparkle special task force, OHBM, virtual.
Jun. 2021	Live Q & A cohost and general enquiry, OHBM Brainhack, virtual.
Jun. 2020	Teaching assistant, OHBM Brainhack, virtual.
Oct. 2018 – Aug. 2019	Member, Open Science Interest Group, University of York
Oct. 2018 – Aug. 2019	Member, Early Career Researcher forum, University of York
Mar. 2017	Organizing committee, Brainhack York, York, UK.

Open source software

2021 – present	NiLearn	Core developer.
2021	load_confounds	Core developer.
2020	Brainhack book	Contributor and maintainer.
2020 - 2021	Pydra-FSL	Contributor and maintainer.
2019	NiBable	Contributor and reviewer.

Membership

Organization for Human Brain Mapping (OHBM); Open Science Special Interest Group, OHBM.

Ad-hoc Peer Review

Aperture Neuro, Advances in Methods and Practices in Psychological Science, Brain Imaging and Behavior, Communications Biology, Journal of Open Source Software, IEEE Transactions on Signal and Information Processing over Networks, Medical Image Analysis, NeuroImage, Neuroinformatics, Neurobiology of Aging, PCI Registered Reports

PROFESSIONAL DEVELOPMENT

Aug. 2019	Neurohackademy, Seattle, USA.
Dec. 2017	Large-scale trends in cortical organization, Leipzig, Germany.
June 2017	Machine Learning Summer School, Tübingen, Germany.
Sep. 2016	Brainhack Vienna, Vienna, Austria.
Feb. 2016	Brainhack@Paris, Paris, France.

MENTORING EXPERIENCE

PhD		
2019–2021	Will Strawson	University of Sussex (with Prof. Sarah Garfinkle)
MSc		
2019	Bronte McKeown	University of York (with Prof. Jonathan Smallwood)
2019	Will Strawson	University of York (with Prof. Jonathan Smallwood)
2018	Rebecca Lowndes	University of York (with Dr. Charlotte Murphy and Prof. Jonathan Smallwood)
2018	Delali Konu	University of York (with Dr. Charlotte Murphy and Prof. Jonathan Smallwood)

TEACHING EXPERIENCE

Oct. 2024	Instructor, Montreal AI Neuroscience educational workshop, Montreal, Canada.
Dec. 2022	Instructor, Montreal AI Neuroscience educational workshop, Montreal, Canada.
July 2022	Teaching assistant, Brainhack School, Montreal, Canada.
Nov. 2021	Instructor, Montreal AI Neuroscience educational workshop, Montreal, Canada.
June 2020	Teaching assistant, OHBM Brainhack, Virtual.
Oct. – Mar. 2016	Teaching assistant, Programming in Neuroimaging, University of York, York, United Kingdom.

TECHNICAL EXPERTISE

Overview: Functional magnetic resonance imaging, Software Development, Data Engineering, Neuroinformatics, Multivariate Analysis.

Technologies

Neuroimaging: FSL, fMRIPrep, Freesurfer, Connectome Workbench, Brain Image Data Structure (BIDS), nipype
Statistics: nilearn, scikit-learn
Deepl learning: PyTorch, Hydra, Orion
Experiment design: PsychoPy
Research computing: container (docker, singularity), cluster computing (SGE, SLURM), version control (git, github), CI/CD (GitHub Action)

Programming Languages

Proficient: Python, shell. Competent: LaTeX, MATLAB. Familiar: R, JavaScript, TypeScript.

Last updated: October 21, 2024