

# CURRICULUM VITAE

## Meysam HASHEMI



See [my Google scholar](#)



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See [my Github](#)



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## CURRENT POSITIONS

### **Senior research fellowship, INS-Inserm UMR 1106, Marseille, France.**

My research integrates mathematical modelling (spiking, mean-field, and whole-brain level), multimodal imaging data, and Bayesian inference to study brain (dys)function. Bridging with clinical translation toward precision medicine, I have developed **Virtual Brain Twins** to identify the causal mechanisms underlying different brain disorders and recently in cognitive tasks, leveraging principles from statistical physics, dynamical systems, and **probabilistic machine learning**, such as *Markov chain Monte Carlo sampling*, *simulation-based inference using deep learning*, *generative AI* ([See my homepage](#)).

## PREVIOUS POSITIONS

Start	End	Institution/ employer	Position and status
01/10/2023	30/09/2027	Institut de Neurosciences des Systèmes (INS), Inserm, UMR 1106, Marseille, France.	Senior Research Fellow (CDD)
01/01/2019	30/09/2023	Protisvalor, Aix Marseille Université (AMU), Marseille, France.	Postdoc Fellow (CDD)
09/10/2017	31/12/2018	SATT Sud-Est, Marseille, France.	Ingénieur de recherche (CDD)
01/09/2016	31/08/2017	INS, La Timone, Marseille, France. CRMBM, La Timone, Marseille, France. TAGC, Luminy, Marseille, France.	Postdoc researcher (CDD)
02/05/2012	31/01/2016	INRIA Nancy –Grand Est, France.	PhD researcher (CDD)
01/10/2008	24/10/2011	Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran.	Teacher assistant, complex systems (CDD)

## EDUCATION

- Bachelor of Science: Physics (solid state)** | 2004-2008 | [Kharazmi University](#), Iran.  
Awarded a national scholarship by ranking 200th among 300,000 students in basic/applied science.
- Master of Science: Physics (soft condensed matter)** | 2008-2012 | [IASBS University](#), Iran.  
Awarded a national scholarship by ranking 10th among 5000 students in basic/ applied science.
- Thesis:** Effect of synaptic activity on spike rate of a Hodgkin-Huxley neuron with delayed feedback.
- PhD: Computer Science** | 2012-2016 | [Université de Lorraine](#), Nancy, France.  
*Thesis:* Analytical and numerical studies of thalamo-cortical population models during anesthesia.
- Postdoctoral: Inference for operating virtual bran twins** | 2016-2024 | [Aix-Marseille Université](#), Marseille, France (HBP Fellow during 2019-2023, and PEPR Fellow during 2023-2027).
- Project:** Probabilistic AI/ML-tailored to virtual brain models of brain diseases toward clinical translation.

## Activities

- Postdoctoral Experience** (9 years), involving (co-)supervision of students, mentoring in the [INCF](#) and [Google Summer of Code](#), conducting tutorials/international workshops, grant writing, as well as consulting services to startups ([VB-Tech](#)), and contributing to large-scale research infrastructure ([EBRAINS project](#)).
- Publication**, > 40 articles and 1270 citations, (co)First: 12, (co)Last: 6, e.g., in journals of [IEEE Rev Biomed Eng](#), [Lancet Neurology](#), [Science Translational Medicine](#), [Science Advances](#), [PNAS](#), [Physical Review E](#), [Machine Learning: Science and Technology](#), [Neural Networks](#), [NeuroImage](#), [PLOS CB](#), [Neuroinformatics](#), [Neural Computation](#), [Royal Soc Interface](#), [Communications Biology](#), [eLife](#) and [iScience](#).
- **Co-inventor** in 3 patents (plus 1 submitted), with [one of which](#) is used in **national clinical trial EPINOV**.
- **Co-PI** in large-scale national and European projects [Brain Health Trajectories](#), and [Virtual Brain Twin](#).
- **Leading Task 3.3.2** in the [EBRAINS 2.0 project](#), developing inference tools operating across scales.
- **Member** of the [VEP-team](#), recognized as the **Best Tech Innovation** in the [Human Brain Project](#).
- **Awarded** the Japanese [WBAI 2025](#) for promoting the brain-inspired artificial general intelligence.