

Anthony M. V. Jakob

CONTACT INFORMATION

Murifeldweg 62
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Switzerland

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EDUCATION

Harvard University 2021 - 2022

Master's Thesis, Computational Neuroscience

Advisor: Sam Gershman

École Polytechnique Fédérale de Lausanne 2019 - 2022

M.Sc., Biomedical Engineering and Computational Neuroscience

University of British Columbia 2018 - 2019

Exchange, Computer Science

École Polytechnique Fédérale de Lausanne 2016 - 2019

B.Sc., Biomedical Engineering

Gymnasium Kirchenfeld 2011 - 2015

Gymnasial Matura

Classes from the B.Sc. in Physics at the University of Bern (13 ECTS)

PROFESSIONAL EXPERIENCE

Clubhouse Hockey 2021 - 2022

Full-Stack Software Engineer

Centre Hospitalier Universitaire Vaudois 2020 - 2021

Data Scientist

Infinight 2017 - 2020

Software Engineer, Web and Application Development

Independent Translator since 2016

Translations to and from French, German and English

Gymnasium Kirchenfeld 2015

High School Teacher, Mathematics

HONORS AND AWARDS	Bertarelli Fellowship in Translational Neuroscience and Neuroengineering	2021 - 2022
	EPFL Excellence Fellowship	2019 - 2020
	EPFL Mobility Fellowship	2018
	Meyer Award	2015
	ECLF French Award	2008 - 2011
PUBLICATIONS	Jakob, A.M.V. and Gershman, S.J. (submitted). Rate-distortion theory of neural coding and its implications for working memory.	
	Jakob, A.M.V. , Mikhael, J.G., Hamilos, A.E., Assad, J.A., Gershman, S.J. (submitted). Dopamine mediates the bidirectional update of interval timing.	
RESEARCH EXPERIENCE	Laboratory of Computational Neuroscience, EPFL Neural signatures of surprise and surprise-based learning in the human brain (Julia, Code)	2020
	Solar Energy and Building Physics Laboratory, EPFL SwissPV: Swiss household-level solar panel identification from ortho-rectified satellite images (Python, Code)	2019
TEACHING EXPERIENCE	PHYS-207: Quantum Physics, EPFL Instructor: Giovanni Dietler	2020
	PHYS-201: Electromagnetism, EPFL Instructor: Giovanni Dietler	2019
	BIO-201: Simulations of Neural Networks, EPFL Instructor: Jacques Rougemont	2019
	CS-119: Organic Chemistry, EPFL Instructor: Luc Patiny	2018
	CH-160: Advanced Chemistry, EPFL Instructor: Samuel Terrettaz	2017
	CS-119: Information Technology, EPFL Instructor: Anastasia Ailamaki, Marcel Salathé	2017

	Sophomore Mathematics , Gymnasium Kirchenfeld Instructor: Anthony Jakob	2015
INVITED TALKS	Harvard CBS NeuroTheory Kickoff. March 14th, 2022. NiH Site Visit Symposium. November 23rd, 2021. Harvard CBS Seminar. October 1st, 2021.	
LANGUAGES AND FRAMEWORKS	English (Native), French (Native), German (Native), Italian (B2), Spanish (B2) Bash , C++ , C# , Dart (Flutter), Java (Android), JavaScript / TypeScript (Node.js, Express, Angular, Deno), Julia (Flux.jl, Turing.jl), MATLAB , PHP , Python (Pandas, PyTorch, Tensorflow), R , SQL	
SKILLS	Fundamentals: Parallel and distributed computing, Unit testing, CI/CD (Jenkins), Cloud computing (Google Cloud, AWS), Agile development, Version control (Git) Programming: Data structures, Optimization (Duality), Linear programming, Dynamic programming, Probabilistic programming Machine learning: Random Forest, SVM, KNN, PCA, ICA, NNMF, GLM, Graphical models, Deep learning, Reinforcement learning, Computer vision Web development: Frontend, Backend, REST API, Database management	
SERVICE AND OUTREACH	Data Analytics Group , EPFL Co-Founder of Data Analytics Group at EPFL , a student association promoting Data Science on campus	2020 - 2022
	Swiss Sequoia Club Co-Founder of Swiss Sequoia Club , a platform for entrepreneurship-minded students from EPFL, ETH and HSG	2020 - 2022
	Education Outreach Department Representative , EPFL Promotion of EPFL in German-speaking Switzerland	2019 - 2020
	AISEC Lausanne Data Analyst	2019 - 2020

Life Science Engineering Association, EPFL
Vice-President of Events committee

2017 - 2018

Coach for first-year students, EPFL

2017 - 2018