NADJA R. GING-JEHLI

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SHORT PROFILE

- **Self-driven first-generation** college and PhD student
- Dedication to **interdisciplinary** scientific inquiry (**computational model-based cognitive neuroscience** and **computational psychiatry**)
- **Strong mathematical background** and **expertise in computational modeling**
- Several years of **experience in behavioral experimental research**

ACADEMIC BACKGROUND

PhD in Psychology, *The Ohio State University* — 2017 – 2022
Columbus, OH USA — (expected)

Advisor committee: Patricia Van Zandt (main advisor), L. Eugene Arnold, Brandon Turner, Jay Myung

Master of Arts in Psychology, *The Ohio State University* — 2017 – 2019
Columbus, OH USA

Master's thesis: "On the implementation of Computational Psychiatry within the framework
of Cognitive Psychology and Neuroscience"
Advisor committee: Patricia Van Zandt, L. Eugene Arnold, Roger Ratcliff

Additional coursework in Psychology, *University of Zurich* — 2016 – 2017
Zurich, Switzerland

Biological Psychology I & II, Neuroeconomics, Social Psychology I & II
(Neuroscience, Immunology, Genetics, Epigenetics, Endocrinology)

Master of Arts in Economics, *University of Zurich* — 2015 – 2017
with Minor in Behavioral and Experimental Economics
Zurich Switzerland

Graduation with honors: magna cum laude
Master's thesis: "Situational determinants of social preferences"
Advisor: Ernst Fehr

Additional coursework in Mathematics, *Swiss Federal Institute of Technology (ETH)* — 2014 – 2015
Zurich Switzerland

Real Calculus I & II, Linear Algebra I & II

Bachelor of Arts in Economics, *University of Zurich* — 2012 – 2014
Zurich, Switzerland

Graduation with honors: magna cum laude
Bachelor's thesis: "Generosity across economic contexts"
Advisor: Roberto A. Weber

Bachelor of Science in Business Administration, *Zurich University of Applied Sciences (ZHAW)* — 2008 – 2012
Winterthur, Switzerland

Graduation with honors: Dean's List Award in recognition of outstanding academic achievement
Awarded with the Rieter-Award for the best Bachelor Thesis in 2012:
"How corporate governance of a consultancy can benefit from findings in
behavioral economics – How implicit incentive signals influence intrinsic motivation"

Industrial Psychology with Certificate from KLZ, *Commercial Learning School (KLZ)* — 2007 – 2008
Zurich, Switzerland

Human Resources Advisor with Certificate, *AKAD School of Business* — 2006 - 2007
Zurich, Switzerland

Apprenticeship with Vocational Baccalaureate Diploma, *Graubündner Kantonalbank* — 2004 – 2007
Chur, Switzerland

The Ohio State University
PhD in Psychology, Columbus, OH USA

8/2017 - 2022
(expected)

- Independently designing and piloting cognitive and social-cognitive tasks to study individuals' cognitive and social-cognitive flexibility
- Applying diffusion decision models (DDMs) to link the behavioral measures from neurocognitive tests with neuronal data like electroencephalogram (EEG)
- Using attentional diffusion decision models (aDDMs), in conjunction with eye tracking, to understand attentional biases under stress
- Analyzing experimental data from non-clinical and clinical studies using different computational models and machine learning algorithms
- Analyzing existing clinical datasets (e.g., autism spectrum disorder, attention-deficit hyperactivity disorder from neurocognitive tests with DDMs)
- Collecting and analyzing EEG and eye-tracking data
- Learning the use of neurofeedback for ADHD
- Programming and conducting studies using fMRI, EEG, and eye-tracking
- Administering semi-structured clinical interviews (K-SADS)

University of Zurich
Research Assistant (20-40% employment), Zurich, Switzerland

7/2013 – 1/2017

Chair of Behavioral Economics (Prof. Roberto Weber), Department of Economics

- Directing several independent research projects
- Analyzing experimental and field data with STATA
- Programming experiments with "z-Tree"
- Assisting in designing and conducting experiments at the Economics Laboratory
- Conducting literature research, surveys, field and online studies

Swiss Federal Institute of Technology (ETH)
Laboratory Assistant (20% employment), Zurich, Switzerland

11/2013 – 7/2017

Decision Science Laboratory, Department D-GESS, Behavioral Studies

- Responsible for checking experiments programed with z-Tree
- Writing codes for PowerShell in order to run experiments
- Independently conducting laboratory experiments
- Assistance in conducting laboratory experiments
- Helping others with programming experiments with "z-Tree"

Statistical Bureau, City of Zurich
Internship as Research Assistant (60% employment), Zurich, Switzerland

7/2013 – 9/2013

Fehr Advice & Partners AG
Junior Consultant & Executive Assistant (50% employment), Zurich, Switzerland

3/2012 – 2/2013

UBS AG (100% employment)
Client Advisor Assistant, Executives/Entrepreneurs Private Banking, Zurich, Switzerland

7/2007 – 2/2012
3/2011 – 2/2012

Individual Client Advisor, Rüschlikon, Switzerland

9/2008 – 2/2011

General Client Advisor, Zollikerberg, Switzerland

7/2007 – 8/2008

Graubündner Kantonalbank
Apprenticeship with Vocational Maturity Diploma, Chur, Switzerland

8/2004 – 6/2007

Published Articles

"**Improving Neurocognitive Testing** using **Computational Psychiatry** – A Systematic Review for **ADHD**" Ging-Jehli, N.R., Ratcliff, R., Arnold, L.E. (2020). Psychological Bulletin.

"Effects of **aging** in a **task-switch paradigm** with the **diffusion decision model**" Ging-Jehli, N.R., Ratcliff, R. (2020). Journal of Psychology and Aging.

"Exploring **cholesterol** supplementation for **autistic symptoms** in Children with Low Cholesterol" Ging-Jehli, N.R., Deepa, M., Hollway J., Hurt, E., Moone, S., Arnold, L.E. (2020). Journal of Developmental and Physical Disabilities.

"**On self-serving strategic beliefs**" Ging-Jehli, N. R., Schneider, F. H., Weber, R. A. (2020). Journal of Games and Economic Behavior.

Articles Under Review

"**Latent cognitive components moderate neurofeedback** response in **ADHD – A computational modeling analysis of a randomized clinical trial**" Ging-Jehli, N.R., Kraemer, H., Arnold, L.E., Roley-Roberts, M.E., deBeus, R. (submitted).

"**Using the Diffusion Decision Model** to understand and address **different cognitive profiles** of attention-deficit hyperactivity disorder **(ADHD)**" Ging-Jehli, N.R., Arnold, L.E., Roley-Roberts, M.E., deBeus, R. (submitted).

"**Neurofeedback** treatment for **ADHD** improves **cognitive deficits** – a **computational modeling** analysis of neurocognitive mechanism" Ging-Jehli, N.R., Arnold, L.E., deBeus, R., Kerson, C., Roley-Roberts, M.E., Panchyshyn, C. (submitted).

"**Comorbid** anxiety and disruptive behavior disorders but not **ADHD presentation moderate neurofeedback** effect in children with ADHD" Roley-Robert, M.E., Bergman, R., Pan, X., Tan, Y., Hendrix, K., deBeus, R., Kerson, C., Arns, M., Ging-Jehli, N.R., Connor, S., Shrader, C., Arnold, L.E. (submitted).

Working Papers

"**Generosity across contexts**," Davis, A. L., Jehli, N. R., Miller, J. H., & Weber, R. A., University of Zurich, 2015, *working paper*.

CURRENT PROJECTS

Neurocognitive study using **own developed** social and cognitive **tasks** and a new **joint-modeling approach** to integrate behavioral responses, eye tracking, and EEG

The **effects of stress** on visuo-spatial attention and social decision-making using **eye tracking**

Applying the Diffusion Decision Model and Machine Learning Algorithms to the Neuropsychological Test Performances and **EEG resting state activity** in an **ADHD** Sample from the **MTA study**

Connectivity analysis using **EEG** from **auditory oddball tasks** from the ICAN and the MTA study

REVIEWS FOR JOURNALS

Clinical EEG and Neuroscience; European Child & Adolescent Psychiatry; Journal of Autism and Developmental Disorders; Neuropsychology; Psychological Medicine

GRANTS

Swiss National Science Foundation for implementing own research project   2019 – 2020
"Computational Psychiatry," (CHF 3,000)

HONORS/AWARDS

Swiss National Science Foundation Graduate Fellowship, Switzerland	2019 – 2020
University Fellowship, The Ohio State University, USA	2017 – 2018
Graduation with honor: magna cum laude, University of Zurich, Switzerland	2017
Graduation with honor: magna cum laude, University of Zurich, Switzerland	2014
Named to the **Dean's List** in recognition of outstanding academic achievements, Switzerland	2012
Awarded the **Rieter-Prize** for the best Bachelor Thesis in 2012, Switzerland	2012

ACADEMIC PRESENTATION

Oral Presentation	"Neurocognitive subtyping of ADHD by Computational Psychiatry", at the International Conference on ADHD by CHADD	2020
Oral Presentation	"Using Computational Modeling as a Moderator Analysis to Understand the Benefits of Neurofeedback for ADHD", at the American Academy of Child and Adolescent Psychiatry	2020
Poster Presentation	"Computational Psychiatry: Studying ADHD in neurocognitive tests", at the Society for Neuroscience Conference, Chicago, IL	2019
Oral Presentation	"ADHD/ASD – A different way how to perceive the world", at the Cincinnati Children's Hospital Medical Center	2019
Poster Presentation	"On the implementation of computational psychiatry to study ADHD", at the Institute for Behavioral Medicine Research Conference, The Ohio State University, USA	2019
Poster Presentation	"Generosity across contexts" at the Social Norms and Institutions, International Conference at the Congressi Stefano Franscini (CSF) of ETH Zurich, Ascona	2015

TEACHING/MENTORING EXPERIENCE

Graduate Teaching Associate, The Ohio State University
Preparation and presentation of lectures, preparing syllabi, preparing homework and quizzes, supervision of group work, grading homework, assignments, tests and quizzes. Both courses are undergraduate and graduate level courses.
    PSYCH5613H: Biological Psychiatry
    PSYCH5614: Cognitive Neuroscience
	2021

Educating and advising three undergraduate research assistants in how to collect and analyze **EEG and eye-tracking data** and how to simultaneously integrate them in **computational models** in the **own funded "Neurocognitive Study"**	2020
Educating and advising two undergraduate research assistants in how to collect and **analyze behavioral computer-based experiments**	2019
Educating and advising undergraduate research assistants in the conductance of **Eye-tracking studies** in Prof. Dr. Ian Krajbich's Neuroeconomics Lab	2018

TECHNICAL/PROGRAMMING SKILLS

Statistical software: Proficient in **R**; Advanced in **STATA, SPSS**, Knowledge in **SAS**

Proficient in **z-Tree (C++)** (Programming Language for Economic Experiments)

Proficient in **MATLAB**, **MATLAB Psychtoolbox, EEGLAB, Signal Processing Toolbox**

Advanced in **Python, LATEX, Fortran, Stan**

Advanced in conducting **eye tracking** studies using **eyelink and gazepoint** as well as **full-cap EEG studies**

Knowledge in conducting **fMRI** studies

European Computer Driving License (ECDL-Certificate) and Swiss **IT Certificate** (SIZ II)

STATISTICAL/COMPUTATIONAL MODELING EXPERIENCE

Various **computational modeling** approaches (using non-Bayesian and Bayesian techniques),
Linear mixed modeling, **moderator and mediator** analyses, **ANOVA**s,
Simple and multivariate **regressions**,
Time-series and **panel data** analyses
machine learning approaches (e.g., support vector, clustering, logistic regression, neural networks)

LANGUAGE PROFICIENCY

German – Native (Swiss citizen)

English - Full Professional Proficiency (oral and written); First Certificate in English; TOEFL iBT English Diploma (reading: 29 of 30, speaking: 28 of 30, listening: 28 of 30, writing: 28 of 30, total score: 113)

French - Full Professional Proficiency (oral and written); DELF A1, A2, A3 and A4

Italian - Basic (oral and written), DELI-diploma