

NADJA R. GING-JEHLI

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(Swiss citizen & Permanent US resident)

RESEARCH PROGRAM

- **Research Areas:** Computational Psychiatry, Cognitive & Social-Cognitive Neuroscience, Mathematical Decision Psychology, Behavioral Experimental Economics, Computer Science.
 - **Neuropsychological Focus:** hierarchical control, mental flexibility, and behavioral adaptability across contexts and over time (fundamental elements of resilience).
 - **Clinical Focus:** ADHD, anxiety, & mood disorders, including individual differences and transdiagnostics.
 - **Translational Focus:** accessible, tailored, and autonomous digital coaching and assessment tools.
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EXPERTISE OVERVIEW

- Developing & piloting a digital platform designed to comprehensively assess mental flexibility beyond traditional neurocognitive tests. By leveraging advanced AI technology, this platform aims to connect scientists, clinicians, and the public to enhance productivity and mental resilience in everyone, particularly benefiting individuals with ADHD, anxiety, and mood disorders.
 - Experience in leading computational modeling cores on inter-institutional Conte Centers.
 - Proficient in combining EEG and eye-tracking with advanced modeling techniques and experiments.
 - Conducting experimental studies across clinical and non-clinical settings and across species.
 - Deep expertise in statistics (Bayesian & Frequentist), machine learning, and modeling across analytical levels.
 - Entrepreneurially inclined with a decade of industry experience in finance and consulting.
 - Self-driven first-generation academic and college student.
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ACADEMIC BACKGROUND

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| Postdoctoral Researcher , <i>Brown University</i> Providence, RI USA Computational Psychiatry & Cognitive and Social-Cognitive Neuroscience (Main Mentor: Michael J. Frank) | 2022 – present |
| PhD in Psychology and Neuroscience , <i>The Ohio State University</i> with Specialization: model-based cognitive neuroscience Columbus, OH USA Dissertation: Characterizing adult attention-deficit hyperactivity disorder (ADHD) with a multidisciplinary computational approach including novel neurocognitive testing and physiological measures. Advisor committee: Patricia Van Zandt (main advisor; focus on Bayesian approaches), Brandon Turner, Jay Myung, L. Eugene Arnold (clinical advisor), Mary Fristad (second clinical mentor) | 2019 – 2022 |
| Master of Arts in Psychology , <i>The Ohio State University</i> with Specialization: cognitive psychology and neuroscience Columbus, OH USA Master's thesis: On the implementation of computational psychiatry within the framework of cognitive psychology and neuroscience. Advisor committee: Roger Ratcliff (main advisor; focus on frequentist approaches), Patricia Van Zandt, L. Eugene Arnold (clinical advisor) | 2017 – 2019 |
| Additional coursework in Psychology , <i>University of Zurich</i> Zurich, Switzerland Biological Psychology I & II, Neuroeconomics, Social Psychology I & II (Neuroscience, Immunology, Genetics, Epigenetics, Endocrinology) | 2016 – 2017 |
| Master of Arts in Economics , <i>University of Zurich</i> with Minor: behavioral and experimental economics Zurich Switzerland Graduation with honors: magna cum laude Master's thesis: Situational determinants of social preferences. Advisor: Ernst Fehr | 2015 – 2017 |
| Additional coursework in Mathematics , <i>Swiss Federal Institute of Technology (ETH)</i> Zurich Switzerland | 2014 – 2015 |

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| Bachelor of Arts in Economics, <i>University of Zurich</i> Zurich, Switzerland Graduation with honors: magna cum laude Bachelor's thesis: Generosity across economic contexts. Advisor: Roberto A. Weber | 2012 – 2014 |
| Bachelor of Science in Business Administration, <i>Zurich University of Applied Sciences (ZHAW)</i> 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" | 2008 – 2012 |
| Industrial Psychology with Certificate from KLZ, <i>Commercial Learning School (KLZ)</i> Zurich, Switzerland | 2007 – 2008 |
| Human Resources Advisor with Certificate, <i>AKAD School of Business</i> Zurich, Switzerland | 2006 - 2007 |
| Apprenticeship with Vocational Baccalaureate Diploma, <i>Graubündner Kantonalbank</i> Chur, Switzerland | 2004 – 2007 |

PROFESSIONAL EXPERIENCE

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| Brown University, Providence, RI USA Postdoctoral Researcher in Computational Psychiatry & Cognitive Neuroscience <ul style="list-style-type: none">• Leading interdisciplinary research team in independent, self-funded study on self-configuring neuropsychological assessments for faster diagnostics and treatment selection for ADHD and anxiety.• Piloting a self-developed computer platform for assessments across cognitive & social domains• Developing a unified modeling approach across behavioral and neurocomputational models• Directing several independent research projects in the domain of computational psychiatry across disorders and species• Consulting on computational modeling cores of Conte Centers on OCD and Depression | 09/2022 – present |
| BGBehavior LLC, Providence, RI USA Co-founder <ul style="list-style-type: none">• Consulting in computational modeling, statistics, and cognitive psychology | 02/2023 – present |
| The Ohio State University, Columbus, OH USA PhD in Psychology and Neuroscience <ul style="list-style-type: none">• Designing, programming, and piloting multiple cognitive and social-cognitive tasks to study cognitive control, cognitive flexibility, and social-cognitive behavior• Collecting and analyzing behavioral, electroencephalographic (EEG) and eye-tracking data• Class project: collecting and analyzing functional magnetic resonance imaging data (fMRI)• Experience in administering laboratory tasks to clinical and non-clinical populations (adults and children)• Experience in computational modeling and machine learning<ul style="list-style-type: none">○ Applying machine learning algorithms and sequential sampling models to link behavioral model parameters from neurocognitive tests with EEG data and eye-tracking data (gaze and pupil measures)○ Analyzing experimental data (e.g., task performance on go/no-go tasks, perceptual discrimination tasks, task-switch paradigms, economic choice tasks) from non-clinical and clinical studies using diffusion decision models, race diffusion models, ballistic accumulator models, ex-Gaussian distribution models, and reinforcement learning models○ Programming of neural networks to understand potential different causes of autism spectrum disorders• Experience in clinical research<ul style="list-style-type: none">○ Conduct own clinical study (from IRB submission to publication as PI)○ Assisting in a randomized clinical trial for neurofeedback treatment for childhood attention-deficit hyperactivity disorder | 08/2017 – 08/2022 |

- Performing biostatistical analyses (e.g., linear mixed modeling, moderator and mediator analyses) for various non-pharmacological interventions for ADHD and for a pharmacological intervention for autism spectrum disorder
- Independently conducting semi-structured clinical interviews (K-SADS) after being trained by medical doctors
- Independently collecting and evaluating responses on various clinical questionnaires after being trained by clinicians and medical doctors

University of Zurich, (20-60% employment) 07/2013 – 01/2017

Research Assistant, Zurich, Switzerland

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 (20-40% employment) 11/2013 – 07/2017

Laboratory Assistant, Zurich, Switzerland

Decision Science Laboratory, Department D-GESS, Behavioral Studies

- Responsible for checking experiments programmed with z-Tree
- Writing codes for PowerShell 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 (60% employment)

Internship as Research Assistant, Zurich, Switzerland

07/2013 – 09/2013

- Data collection, preparation, and statistical analysis (SAS & Excel)

Fehr Advice & Partners AG (50-100% employment)

03/2012 – 02/2013

Chief of Staff & Consultant, Zurich, Switzerland

- Junior Consultant in several client projects
- supervision of 4 team assistants

UBS AG (100% employment)

07/2007 – 02/2012

Client Advisor Assistant, Executives/Entrepreneurs Private Banking, Zurich, Switzerland 03/2011 – 02/2012

- Worked closely with specialists from Investment Banking
- supported Client Advisors

Individual Client Advisor, Rüslikon, Switzerland

09/2008 – 02/2011

- Managed own client book (business volume approx. CHF 140M)
- Deputy for branch manager & trained apprentices in practice and in financial mathematics

General Client Advisor, Zollikerberg, Switzerland

07/2007 – 08/2008

Graubündner Kantonalbank (100% employment)

08/2004 – 06/2007

Apprenticeship with Vocational Maturity Diploma, Chur, Switzerland

PUBLICATIONS

Published Articles

*Mentees

1. Strittmatter, Y., Spitzer, W.H., Ging-Jehli, N.R., Musslick, S. (2024). A jsPsych Touchscreen Extension for Behavioral Research on Touch-Enabled Interfaces. *Behavior Research Methods*.
2. Ging-Jehli, N.R., Kuhn, M., Blank, J.M., Chanthrakumar, P.*, Steinberger, D.C., Yu, Z., Herrington, T.D., Dillon, D.G., Pizzagalli, D.A., Frank, M.J. (2024). Cognitive signatures of depression, anhedonia, and

affective states using computational modeling and neurocognitive testing.

Biological Psychiatry: Cognitive Neuroscience and Neuroimaging.

3. Ging-Jehli, N.R., Arnold, L.E., Van Zandt, T. (2023). Cognitive & attentional mechanisms of cooperation – with implications for attention-deficit hyperactivity disorder and cognitive neuroscience. *Cognitive, Affective, & Behavioral Neuroscience.*
4. Ging-Jehli, N.R., Painter, Q.A.*, Kraemer, H., Roley-Roberts, M.E., Panchyshyn, C.*, deBeus, R., Arnold, L.E. (2023). A Diffusion Decision Model Analysis of The Cognitive Effects of Neurofeedback for ADHD. *Neuropsychology.*
5. Ging-Jehli, N.R., Kraemer, H., Arnold, L.E., Roley-Roberts, M.E., deBeus, R. (2023). Latent cognitive components moderate neurofeedback response in ADHD – A computational modeling analysis of a randomized clinical trial. *Journal of Clinical and Experimental Neuropsychology.*
6. 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. (2022). Comorbid anxiety and disruptive behavior disorders but not ADHD presentation moderate neurofeedback effect in children with ADHD. *Applied Psychophysiology and Biofeedback.*
7. Ging-Jehli, N.R., Arnold, L.E., Roley-Roberts, M.E., deBeus, R. (2022). Characterizing underlying cognitive components of ADHD presentations and co-morbid diagnoses – A diffusion decision model analysis. *Journal of Attention Disorders.*
8. Ging-Jehli, N.R., Ratcliff, R., Arnold, L.E. (2021). Improving Neurocognitive Testing using Computational Psychiatry – A Systematic Review for ADHD. *Psychological Bulletin.*
9. Ging-Jehli, N.R., Ratcliff, R. (2020). Effects of aging in a task-switch paradigm with the diffusion decision model. *Journal of Psychology and Aging.*
10. Ging-Jehli, N.R., Deepa, M., Hollway J., Hurt, E., Moone, S., Arnold, L.E. (2020). Exploring cholesterol supplementation for autistic symptoms in Children with Low Cholesterol. *Journal of Developmental and Physical Disabilities.*
11. Ging-Jehli, N.R., Schneider, F.H., Weber, R.A. (2020). On self-serving strategic beliefs. *Journal of Games and Economic Behavior.*
12. Davis, A. L., Jehli, N.R., Miller, J.H., & Weber, R.A. (2015). *Generosity across contexts*. CESifo Working Paper, No. 5272, Center for Economic Studies and ifo Institute (CESifo), Munich.

Articles Under Review

13. Ging-Jehli, N.R., Cavanagh, J.F., Ahn, M., Segar, D.J., Asaad, W.F., Frank, M.J. (submitted). Distinct basal ganglia decision dynamics under conflict and uncertainty.
14. Ging-Jehli, N.R., Weigard, A. (submitted). Lumping versus splitting in mechanistic computational psychiatry models: integrating the search for specialized and task-general functions.
15. Ging-Jehli, N.R., Arnold, L.E., Sellers J.*, Van Zandt, T. (submitted). Broader visual processing and distinct pupil dynamics facilitate resolving perceptual conflict and compensate for ADHD distractibility.

Published Conference Abstracts

1. Ging-Jehli, N. R. (2023). Utility of Computational Phenotyping for Psychiatric Disorders With Low Essentiality: Empirical Findings for Attention-Deficit/Hyperactivity Disorder and Depressive Disorders. In *Neuropsychopharmacology* (Vol. 48, pp. 30-30).
2. Ging-Jehli, N. R., & Arnold, L. E. (2023). 13.3 Cognitive Role of EEG Theta/Beta-Ratio for Behavior: Accounting for ADHD Heterogeneity. *Journal of the American Academy of Child & Adolescent Psychiatry*, 62(10), S344.
3. Ging-Jehli, N., Arnold, L. E., Sellers, J.*, & Van Zandt, T. (2022). 30.3 Eye-Tracking, Gaze, and Pupil Dynamics in ADHD: Biofeedback Possibilities During Novel Perceptual Conflict Task. *Journal of the American Academy of Child & Adolescent Psychiatry*, 61(10), S323.
4. Painter, Q. A.*, Ging-Jehli, N., Arnold, L. E., Roley-Roberts, M. E., & Pan, X. J. (2022). 30.4 The Effect of ASD Features on Neurocognitive Change With Neurofeedback in ADHD: New ICAN Data. *Journal of the American Academy of Child & Adolescent Psychiatry*, 61(10), S323.

5. Roley-Roberts, M., Kerson, C., [Ging-Jehli, N.](#), & Pan, X. (2021). 30.2 Moderating Effects of Psychiatric Diagnoses on Neurofeedback for ADHD at 25-month Follow-up. *Journal of the American Academy of Child & Adolescent Psychiatry*, 60(10), S304.
6. [Ging-Jehli, N.](#), Arnold, L. E., deBeus, R., Roley-Roberts, M., & Kraemer, H. (2021). 30.4 Underlying Cognitive Components Respond to Neurofeedback For ADHD And Moderate Clinical Outcome. *Journal of the American Academy of Child & Adolescent Psychiatry*, 60(10), S305.
7. Arnold, L. E., Roley-Roberts, M. E., [Ging-Jehli, N.](#), Kerson, C., Pumphrey, K., & Loo, S. K. (2020). ADHD Neurofeedback 25-Month Follow-Up, Moderation of Response, and Neurocognitive Subtyping. In *2020 Virtual Meeting*. AACAP.

CURRENT PROJECTS

- Developing an interactive game with self-configuring coaching elements to test different interventions for mood dysregulation and applicable for computational models to study hierarchical control across contexts
- A unified modeling approach, integrating sequential sampling models with neurocomputational models
- Characterize disorder-specific and transdiagnostic features across cognitive and social domains
- Neuronal and attentional signatures of attention-deficit/hyperactivity disorder (ADHD) within a novel cognitive flexibility task
- Characterizing bipolar disorder, depression, and schizophrenia: disentangling the roles of working memory and reinforcement learning
- Computational phenotyping of obsessive-compulsive disorders (OCD) within approach-avoidance Processing context

SELECTED PUBLIC OUTREACH AND PRESS RELEASES

Interview on the weekly "Wellness Wednesday" show on "All Sides with Ann Fisher" - a live public affairs talk show on WOSU-NPR (89.7 FM) Radio in Columbus, Ohio. Link: [Radio Interview on Computational Psychiatry and ADHD - YouTube](#)

Interview with Psychiatry & Behavioral Health Learning Network (Magazine). Link: [Using Computational Models to Improve ADHD Diagnosis and Treatment \(hmpgloballearningnetwork.com\)](#)

Press coverage in *The Science Times*. Link: [Computational Models Could Help Diagnose Children with ADHD | Science Times](#)

Press release: [A pursuit of better testing to sort out the complexities of ADHD \(osu.edu\)](#)

AD HOC JOURNAL REVIEWS (N≥33)

Biological Psychiatry; Brain; Clinical EEG and Neuroscience; Cognitive, Affective, & Behavioral Neuroscience; Cognitive Science; European Child & Adolescent Psychiatry; Frontiers in Psychology; Journal of Autism and Developmental Disorders; Journal of Cognitive Neuroscience; Molecular Psychiatry; Nature Communications; NeuroImage; Neuropsychology; Neuroscience and Biobehavioral Reviews; Psychological Medicine; Science Advances

RESEARCH GRANTS

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| Carney Institute's Advancing Research Careers (ARC) program (NINDS/NIH) for implementing independent research project "smartphone-compatible perpetual game with mechanistic neurocognitive assessments" (Amount: USD 25,000) | 2023 – 2025 |
| Swiss National Science Foundation for implementing independent research project "Using Computational Psychiatry to explore transdiagnostic features of neurodevelopmental- and mood-related disorders" (Amount: CHF 10,000) | 2023 – 2025 |
| Swiss National Science Foundation for implementing independent research project: "Using Computational Psychiatry for Phenotyping ADHD" (Amount: CHF 3,000) | 2019 – 2020 |

AWARDS AND HONORS

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| Travel Award for the American College of Neuropsychopharmacology (ACNP) conference (Amount: USD 1,000) | 2023 |
| ThinkSwiss & Fullbright Alumni Travel Award , Embassy of Switzerland in the USA (Amount: USD 500) | 2023 |
| Swiss National Science Foundation Postdoc Award , Switzerland (Amount: CHF 5300) | 2023 |
| Travel & Networking Award , Women of Mathematical Psychology (Amount: EUR 500) | 2023 |
| NIH Computational Psychiatry Postdoctoral Training (T32) , Brown University, USA (Amount: USD 113,680) | 12/2022 – 09/2023 |
| Presidential Fellowship , The Ohio State University, USA (Amount: USD 40,000) | 08/2021 – 08/2022 |
| Swiss National Science Foundation Graduate Fellowship , Switzerland (Amount: CHF 93,725) | 01/2019 – 12/2020 |
| University Fellowship , The Ohio State University, USA (Amount: USD 20,000) | 08/2017 – 08/2018 |
| 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 |

CONFERENCE PRESENTATIONS

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| Poster Presentation “Using Computational Modeling to distinguish between anhedonia and depression”, 26 th annual Mind Brain Research Day, Brown University, Rhode Island (USA) | 2024 |
| Oral Presentation “Decoding Complexity: A Deep Dive into Mechanistic Computational Phenotyping for ADHD and Depression” at the American College of Neuropsychopharmacology (ACNP) Annual Conference, Tampa FL (USA) | 2023 |
| Oral Presentation “Combining mechanistic tasks with innovative sequential sampling models to different slow-down mechanisms” at the New England Research on Decision-Making (NERD) conference, Boston (USA) | 2023 |
| Oral Presentation “Cognitive Role of EEG Theta/Beta-Ratio for Behavior: Accounting for ADHD Heterogeneity” at the American Academy of Child and Adolescent Psychiatry (AACAP) conference, New York City (USA) | 2023 |
| Oral Presentation “Dissecting decision dynamics in the basal ganglia” at the Mathematical Psychology Conference, Amsterdam (NL) | 2023 |
| Poster Presentation “Multidimensional computational phenotyping of anhedonia & depression” at the Computational Psychiatry Conference, Dublin (IE) | 2023 |
| Poster Presentation “Broader visual processing and distinct pupil dynamics facilitate perceptual conflict and compensate for ADHD distractibility”, at the Mental Effort Workshop, Providence RI (USA) | 2022 |
| Oral Presentation “Eye-tracking, Gaze, and Pupil Dynamics in ADHD: Biofeedback Possibilities during Novel Perceptual Conflict Task”, at the American Academy of Child and Adolescent Psychiatry (virtually), Toronto (CA) | 2022 |
| Oral Presentation “Personalized medicine using computational psychiatry”, at the American Academy of Child and Adolescent Psychiatry (virtual due to COVID-19) | 2021 |

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| Oral Presentation | “Neurocognitive subtyping of ADHD by Computational Psychiatry”, at the International Conference on ADHD by CHADD (virtual) | 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 (virtual due to COVID-19) | 2020 |
| Poster Presentation | “Computational Psychiatry: Studying ADHD in neurocognitive tests”, at the Society for Neuroscience Conference, Chicago, IL (USA) | 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, TI (CH) | 2015 |

INVITED TALKS

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| Oral Presentation | “Promoting resilience with neurocomputational digital tools”, Invited talk at The Ohio State University, Department of Psychiatry & Behavioral Health, Columbus OH (USA) | 2024 |
| Oral Presentation | “Empowering mental health research & care with integrative neurocomputational, psychiatry tools”, Invited talk at the National Institute of Mental Health (Host: Daniel Pine), Washington DC (USA) | 2024 |
| Oral Presentation | “Integrative Computational Approaches for ADHD, mood disorders, and comorbidities – with implications for OCD”, Invited talk at the Functional Neuroimaging & Bioinformatics Lab, Harvard McLean, Boston (USA) | 2024 |
| Oral Presentation | “Integrative Approaches for Cognitive Neuroscience & Computational Psychiatry” Invited talk at the Translational Neuromodeling Unit, ETH Zurich, Zurich (CH) | 2024 |
| Oral Presentation | “Promises and Challenges of Computational Psychiatry” Invited talk at the Nicolas Langer Lab, University of Zurich, Zurich (CH) | 2024 |
| Oral Presentation | “Innovating Approaches in Social-Cognitive Neuroscience & Computational Psychiatry – Empirical Evidence for ADHD & Depression” Invited talk at the Rebecca Saxe Lab, Massachusetts Institute of Technology, Boston (USA) | 2024 |
| Oral Presentation | “Towards a better ecosystem for managing, caring, and researching mental health conditions” at the ThinkSwiss Event at the Swiss Embassy, Washington DC (USA) | 2023 |
| Oral Presentation | “Using game theory and experimental economics to study social-cognitive characteristics in ADHD”, at the Social-Cognitive Seminar Series at Brown University, Providence RI (USA) | 2023 |
| Oral Presentation | “Addressing ADHD and comorbidities with computational psychiatry: using new integrative testing; refining clinical characteristics; and tailoring treatments”, invited talk at Brown University, USA | 2022 |
| Oral Presentation | “ADHD/ASD – A different way how to perceive the world”, at the Cincinnati Children’s Hospital Medical Center, USA | 2019 |

TEACHING

Lecturer at the Carney BRAINSTORM Computational Modeling Workshop, Brown University 2024
Prepared and delivered an in-depth introductory into sequential sampling modeling, focusing on its practical applications in cognitive neuroscience and computational psychiatry. Provided comprehensive instruction on designing neurocognitive experiments, applying, and interpreting model parameters, and model fitting and

comparison. Engaged participants (undergraduates, graduates, and post-graduate students) through hands-on teaching and practical applications.

Organizer of Modeling Workshops in Computational Neuropsychology at: Rutgers University, Columbia University 2024

Developed and conducted comprehensive modeling workshops (2 days) focused on sequential sampling modeling (e.g., diffusion decision modeling) for faculty members, postgraduate, and graduate students. Designed and implemented interactive, hands-on practical sessions using the modeling toolbox HSSM. Prepared extensive educational materials, including lecture slides and tutorial guides, contributing to improved modeling competencies among attendees. Collaborated with faculty members to tailor tutorial content to current research and educational needs within the departments.

Sheridan Teaching Seminar (Certificate I), Brown University 2023

Designed and prepared an (online) course: “Foundations of Computational Psychiatry Toolkits and Applications” Excerpt: In this course, we go beyond the typical focus on technical modeling skills. Instead, we cover different tools and delve into the holistic process of computational modeling in psychiatry.

Graduate Teaching Associate, The Ohio State University 2021

Preparation and presentation of lectures, preparing syllabi, preparing homework and quizzes, supervision of group work, grading homework, assignments, tests and quizzes. The first two courses are undergraduate and graduate level courses. The last three courses are undergraduate level courses.

PSYCH2220: Data Analytics in Psychology

PSYCH5613H: Biological Psychiatry

PSYCH5614: Cognitive Neuroscience

PSYCH3331: Abnormal Psychology

PSYCH4475: Psychology of The Self

Apprenticeship Trainer, UBS AG 2008 – 2011

Preparation and presentation of lectures in economics, banking, and finances. Supervision of apprentices (including developing, conducting, and grading essays, assignments and quizzes).

LEADERSHIP & SUPERVISION

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| Advising summer intern (Seik Oh) from computer science in process-oriented modeling | 06/2024 – current |
| Leading a team (4 software engineers, 2 graphic illustrators, 2 research assistants) in self-funded independent study to develop innovative platform for wholistic neurocognitive testing at Brown University | 01/2024 – current |
| Advising graduate student (Ziwei Cheng) in cognitive computational modeling at Brown University | 01/2024 – current |
| Advising engineering student (Swarag Thaikkandi) in cognitive computational modeling at Brown University (as part of a Conte Center) | 09/2022 – current |
| Advising data science student (Shiqi Wang) in statistical analyses & machine learning (1 semester) at Brown University | 09/2023 – 12/2023 |
| Advising undergraduate capstone project (1 semester) in decision sciences (Elizabeth Duchan) at Brown University | 09/2023 – 12/2023 |
| Advising medical student (Ahmed Abdelbaki) in statistics at The Ohio State University | 08/2023 – 12/2023 |
| Advising clinical/medical graduate students (Pranavan Chanthrakumar, Quinn Painter) and undergraduate students (Qile Jiang) in computational modeling | 09/2022 – 04/2023 |
| Advising undergraduate research assistants (Karly Britt, Aditya Maroju, Prateek Palsule, Jacob Sellers) in the Van Zandt lab (mentoring in: conducting statistical analyses, collecting eye-tracking and EEG data, applying computational models, applying to graduate school) | 08/2020 – 05/2022 |

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| Advising research assistants (Shea Connor, Alex Lingel, Madeline Thomas, Catherine Panchyshyn) in conducting laboratory experimental paradigms (research assistants from various labs) | 02/2019 – 12/2019 |
| Advising research assistants (Justin Voyzey, Sam Stelnicki, Saarthak Gaur) in conducting eye-tracking studies (research assistants from various labs) | 01/2018 – 12/2018 |
| Leading a team (4 members) as a chief of staff in a Consultancy Boutique | 02/2012 – 03/20213 |

PROFESSIONAL SERVICE AND OUTREACH

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| Writer, CPN Modeling Blog Series for educating a broad audience in computational neurocognition & psychology Modeling Blogs Nadja Ging-Jehli (gingjehli.com) | 05/2024 – present |
| Reviewer for submissions to Cognitive Computational Neuroscience (CCN) conference | 2024 |
| ARC program representer at the Annual Postdoctoral Symposium, at Brown University | 2024 |
| Consultant in computational modeling across universities | 2023 – present |
| Advisor for students' capstone projects in decision sciences | 2023 |
| Modeling advisor for the open-source HDDM toolbox (helping resolving modeling issues) | 2022 |
| Statistical advisor for medical and clinical students conducting statistical analyses in SPSS & R | 2022 |
| Undergraduate Mentor for PhD applications (writing workshop, review materials, interviews) | 2020 – 2022 |
| Guest lecture in an undergraduate course: how to find research topics and how to apply for PhD programs | 2021 |
| Internal workshop for undergraduates: Using R to simulate data with the diffusion decision model | 2019 |
| Guest lecture as a volunteer at the high school in Pfaffikon, ZH (Switzerland). Topic: "What is Macroeconomics and how to handle money responsibly?" | 2011 |

PROFESSIONAL MEMBERSHIPS

Psychonomic Society; Society for Mathematical Psychology; Society for Neuroscience; Member of SwissImpact Transcontinental Computational Psychiatry Workgroup (TCPW); Women of Mathematical Psychology

ADDITIONAL TRAINING

Neuroscience

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| Computational Cognitive Neuroscience (1 semester; course by Michael J. Frank), Brown University | 2023 |
| Foundation of Neuroscience I and II , School of Medicine (1 year), Ohio State University | 2018 - 2019 |
| Neuroscience Lab including Brain Dissections (1 year), Ohio State University | 2017 - 2018 |
| Behavioral Endocrinology , School of Medicine (1 semester), Ohio State University | 2017 |
| Introduction into fMRI (1 semester), Ohio State University | 2017 |

Computational Modeling

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| Reinforcement Learning Workshop (1 day), Mathematical Psychology Conference | 2023 |
| Dynamic Causal Modeling Workshop (2 days), Brown University | 2022 |
| Computational Modeling Workshop (2 weeks), Carney Center for Computational Brain Science | 2022 |
| Modeling EEG Data Workshop (2 weeks), Brainstorm EEG Challenge, Brown University | 2022 |
| Computational Psychiatry Workshop (1 week), Zurich (Switzerland) | 2019 |

IT & MedTech

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| Med Tech Leadership Program (6 months), New England Medical Innovation Center | 2022/2023 |
| European Computer Driving License Certificate (1 year), Chur (Switzerland) | 2007 |

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| Swiss IT Certificate (1 year), Chur (Switzerland) | 2007 |
| <u>Leadership & Teaching</u> | |
| Sheridan Teaching Certificate (1 semester), Brown University | 2023 |
| Leadership Workshop for apprenticeship trainers (1 week), UBS AG | 2008 |

PROGRAMMING & TECHNICAL PROFICIENCY

Programming & Softwares

Proficient in working with operating systems: **Linux**, **IOS** (mac), and **Microsoft**

Proficient in **R**; Advanced in **STATA**, **SPSS**, and **WinBUGS**, Knowledge in **SAS** and **JASP**

Proficient in computational modeling softwares: **Stan**, **BRMS**, **EMC**, **DMC**, **HDDM**, **HSSM**, **fast-DM**

Proficient in **MATLAB** (including toolboxes: **Psychtoolbox**, **Signal Processing**, **ERPLab**)

Proficient in **z-Tree** (**programming language: C++**) program for real-time interactions in lab experiments

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

Advanced in writing **bash scripts**

Knowledge in **PyMC**, **PyTorch**, **emergent** (biologically inspired neural networks)

Hardware & Technology

Proficient in conducting **eye tracking** studies using **eyelink** and **gazeport**

Advanced in conducting **full-cap** electroencephalographic (**EEG**) studies

Knowledge in collecting and analyzing **fMRI** data

COMPUTATIONAL MODELING PROFICIENCY

Within both Bayesian & Frequentist frameworks

Proficient in **sequential sampling modeling** (e.g., diffusion decision modeling)

Proficient in **descriptive distribution modeling** (e.g., ex-Gaussian distribution modeling)

Advanced in **reinforcement learning modeling** (e.g., RLWM modeling)

Knowledge in **biologically inspired neural network modeling** (e.g., PBWM modeling)

MACHINE LEARNING PROFICIENCY

Proficient in **support vector machines**

Proficient in **cluster-based analyses**

Proficient in **logistic regression**

Proficient in **principal and independent component analyses**

Proficient in **factor analyses**

Advanced in **deep neural networks**

STATISTICAL PROFICIENCY

Proficient in **multi-level linear mixed modeling** and **Bayesian hierarchical modeling**

Proficient in **moderator** analyses and **mediator** analyses (particularly for randomized clinical trials)

Proficient in **ANOVAs**, simple and multivariate **regressions**

Proficient in **Time Series Analyses**

Knowledge in **structural equation modeling** and **dynamic causal modeling**

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