

Daniel Yasumasa Takahashi
Curriculum Vitae

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Personal Information

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Formal Education

2010 - present Postdoctoral Research Fellow.
Department of Psychology
Princeton University, Princeton, NJ USA
Scholarship: Pew Latin American Fellowship
Supervisor: Asif Ghazanfar

2009 - 2010 Postdoctoral Research Fellow.
Institute of Mathematics and Statistics
Universidade de São Paulo, USP, Sao Paulo, Brazil
Scholarship: Fundação de Amparo à Pesquisa do Estado de São Paulo
Supervisor: Antonio Galves

2004 - 2009 PhD in Bioinformatics.
Universidade de São Paulo, USP, Sao Paulo, Brazil
Universidade de São Paulo
Title: Medidas de Fluxo de Informação com Aplicação em Neurociência,
Advisor: Koichi Sameshima and Luiz Antonio Baccalá
Scholarship: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior

2004 - 2008 Bachelor's in Computational and Applied Mathematics.
Universidade de São Paulo, USP, Sao Paulo, Brazil
Title: Teorema do Núcleo de Schwartz
Advisor: Paulo Domingos Cordaro

1998 - 2003 Medical degree.
Universidade de São Paulo, USP, Sao Paulo, Brazil
Title: Redes neurais artificiais no auxílio ao diagnóstico da doença de Alzheimer
Advisor: Koichi Sameshima
Scholarship: Conselho Nacional de Desenvolvimento Científico e Tecnológico

Honors and Awards

2010 Pew Latin American Fellowship

2007 Travel Grant Award - 10th Tamagawa-Riken Dynamic Brain Forum

2006 Best Work Award - I Latin American School on Computational Neuroscience

2002 Oswaldo Cruz Award in medical research – Honorable mention

1997 Bronze medal – Brazilian Mathematical Olympiad

Bibliographic Production

Articles Published in Refereed Journals

* = equal contribution

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Brazilian Journal of Probability and Statistics, in press.
34. Ghazanfar AA and **Takahashi DY** (2014)
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33. Ghazafar AA, and **Takahashi DY** (2014)
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32. **Takahashi DY**, Baccalá LA, Sameshima K (2014)
Canonical information flow decomposition among neural structure subsets.
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31. Lerasle M*, and **Takahashi DY*** (2014)
Sharp oracle inequalities and slope heuristic for specification probabilities estimation in discrete random fields.
Bernoulli, in press.
30. Gallesco C*, Gallo S*, **Takahashi DY*** (2014)
Explicit estimates in the Bramson-Kalikow model
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29. Fujita A, **Takahashi DY**, Patriota AG, Sato JR (2014)
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28. Fujita A, **Takahashi DY**, Patriota A (2014)
A non-parametric method to estimate the number of clusters.
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27. **Takahashi DY**, Narayanan DZ, Ghazanfar AA (2013)
Coupled oscillator dynamics of vocal turn-taking in monkeys.
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26. Santos SS, **Takahashi DY**, Nakata A, Fujita A (2013)
A comparative study of statistical methods used to identify dependencies between gene expression signals
Briefing in Bioinformatics, v. 15, 906-918.
25. Baccalá LA, de Brito CS, **Takahashi DY**, Sameshima K (2013)
Unified asymptotic theory for all partial directed coherence forms
Philosophical Transactions of the Royal Society A, v. 371, 20120158
24. Sato JR., **Takahashi DY**, Hoexeter, MQ, Massirer KM, Fujita A (2013)
Measuring network's entropy in ADHD: A new approach to investigate neuropsychiatric disorders
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23. Gallo S*, Lerasle M*, **Takahashi DY*** (2013)
Markov approximations of chains of infinite order in the \bar{d} -metric
Markov Processes and Related Fields, v. 19, 51-82.
22. Gallo S* and **Takahashi DY*** (2012)
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21. **Takahashi DY**, Sato JR, Ferreira CE, Fujita A (2012)
Discriminating different classes of biological networks by analyzing the graphs spectra distribution.
PLoS ONE, v. 7(12): e49949. doi:10.1371/journal.pone.0049949
20. Ghazanfar AA, **Takahashi DY**, Mathur NA, Fitch WT (2012)
Cineradiography of monkey lipsmacking reveals the putative origins of speech dynamics.
Current Biology, v. 22, p. 1176-1186.
19. Lerasle M* and **Takahashi DY*** (2011)
An oracle approach for interaction neighborhood estimation in random fields.
Electronic Journal of Statistics, v. 5, p. 534-571.
18. **Takahashi DY**, Baccalá LA and Sameshima K (2010)
Information theoretic interpretation of frequency domain connectivity measures.
Biological Cybernetics, v.103, p. 463-469.
17. Sato JR , **Takahashi DY**, Arcuri SM, Sameshima K, Morettin PA, Baccalá, LA (2009)
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16. Dzirasa K., Ramsey AJ, **Takahashi DY**, Stapleton J, Potes JM, Williams JK, Gainetdinov RR, Sameshima K, Caron MG, Nicolelis MAL (2009)
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15. Raicher I, Shimizu M, **Takahashi DY**, Nitrini R, Caramelli P (2008)
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International Psychogeriatrics, v. 20, p. 471-481.
14. **Takahashi DY**, Baccalá L, Sameshima, K (2008)
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13. Lopes RI, Nogueira L, Albertotti CJ, **Takahashi DY**, Lopes RN (2008)
Comparison of of virtual cystoscopy and transabdominal ultrasonography with conventional cystoscopy for bladder tumor detection.
Journal of Endourology, v. 22, p. 1725-1729.
12. Shimizu M, Raicher I, **Takahashi DY**, Caramelli P, Nitrini R (2008)
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Arquivos de Neuro-Psiquiatria, v. 66, p. 625-630.
11. Raicher I, **Takahashi DY**, Kanda PAM, Nitrini R, Anghinah R (2008)
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10. **Takahashi DY**, Baccalá LA, Sameshima K (2007)
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9. Vittielo AP, Ciriaco JG, **Takahashi DY**, Nitrini R, Caramelli P (2007)
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8. Sato JR, Felix MM, **Takahashi DY**, Amaro Jr E, Brammer MJ, Morettin PA (2006)
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7. Sato JR, **Takahashi DY**, Cardoso EF, Martin MGM, Amaro Jr E, Morettin PA (2006)
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6. Nitrini R, Caramelli P, Herrera E, Castro I, Bahia VS, Anghinah R, Caixeta L, Radanovic M, Charchat-Fichman H, Porto CS, Carthery MT, Hartmann APBJ, Huang N, Smid J, Lima P, **Takahashi DY**, Takada LT (2005)
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International Journal of Geriatric Psychiatry, v. 20, n. 3, p. 247-253.

5. Nitrini R, Caramelli P, Herrera E, Bahia VS, Caixeta L, Radanovic M, Anghinah R, Charchat-Fichman H, Porto CS, Carthery MT, Hartmann APBJ, Huang N, Smid J, Lima P, Takada LT, **Takahashi DY** (2005)
Incidence of dementia in a community-dwelling Brazilian population.
Alzheimer Disease and Associated Disorders, v. 18, n. 4, p. 241-246.

4. Sameshima K, **Takahashi DY**, Baccalá, LA (2005)
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3. Anghinah R, Caramelli P, **Takahashi DY**, Nitrini R, Sameshima K (2005)
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Arquivos de Neuro-Psiquiatria, v. 63, n. 1, p. 83-86.

2. Costa GGO, Ctenas BB, **Takahashi DY**, Mion O, Mello JJF, Butugan O (2005)
Comparação entre a Rinometria Acústica, 'Peak Flow' Nasal Inspiratório e sua Correlação com Sintomas e Sinais Clínicos de Rinite.
Arquivos de Otorrinolaringologia, v. 9, n. 3, p. 203-211.

1. Hartmann APBJ, Almeida SM, Livramento JA, Nitrini R, **Takahashi DY**, Caramelli P (2004)
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Book Chapters

5. **Takahashi DY**, Baccalá LA, Sameshima K (2014)
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4. Baccalá LA, **Takahashi DY**, Sameshima K (2014)
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In: *Methods in Brain Connectivity Inference through Multivariate Time Series Analysis*, p. 113-131.

3. Baccalá LA, **Takahashi DY**, Sameshima K (2006)
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In: *Handbook of Time Series Analysis* ed: Wilterhalter; Schelter; Timmer, Springer, p. 411-435.

2. Sameshima K, **Takahashi DY** (2004)
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In: *Métodos Quantitativos em Medicina* ed. São Paulo : Manole, v.1, p. 493-526.

1. **Takahashi DY**, Charchat H, Nitrini R, Caramelli P, Sameshima K (2000)
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In: *Anais do I congresso de lógica aplicada à tecnologia - LAPTEC.1* ed. São Paulo : Plêiade, v.1, p. 359-371.

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4. Brito SC, Baccalá LA, **Takahashi DY**, Sameshima K (2010)
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IEEE Engineering in Medicine and Biology Society. Conf. , v.1, p.1718 - 1721.
3. **Takahashi DY**, Baccalá LA, Sameshima K (2010)
Frequency domain connectivity: an information theoretic perspective
IEEE Engineering in Medicine and Biology Society. Conf. , v.1, p.1726 - 1729.
2. Baccalá LA, **Takahashi DY**, Sameshima K (2007)
Generalized Partial Directed Coherence
International Conference on Digital Signal Processing, v.1. p.162 - 166
1. **Takahashi DY**, Charchat H, Caramelli P, Nitrini R, Sameshima K
Análise da não-linearidade do modelo diagnóstico neuropsicológico da doença de Alzheimer por redes neurais artificiais
Anais do VII congresso brasileiro de informática em saúde, 2000.

Articles in Magazines

2. Takahashi DY
Total Saúde. , v.30, p.14 - 14, 2010.
<http://www.revistatotalsaude.com.br/Default.aspx?Tabid=55&ItemID=128>
1. Takahashi DY
Total Saúde. , p.12 - 13, 2010.
<http://www.revistatotalsaude.com.br/Default.aspx?Tabid=56&ItemID=148>