

Naftali Tishby: CURRICULUM VITAE

1. Personal:

Born: 1953, Jerusalem, Israel
Familial Status: Married + 4.
IDF Military service: 1971-1980 (Atuda)

2. Academic Education:

1971 – 1974 B.Sc. in Mathematics and Physics, Hebrew University.
 1977 – 1980 M.Sc. in Physics. Tel-Aviv University.
 1980 – 1985 Ph.D. in Theoretical Physics, Hebrew University.

3 Academic appointments:

Since 1997 **Professor**, Compute Science, The Hebrew University
 2010 - **Member of the Edmond and Lilly Safra Center for Brain Sciences (ELSC)**
 Hebrew University
 2011 - **PI, Intel Collaborative Research Institute for Computational Intelligence**
 2012 - **Director, MOST national knowledge center in Machine Learning & AI**
 2010 - 2013 **Director, Interdisciplinary Center for Neural Computation (ICNC), .**
 2004 – 2008 Chair of the science appointments committee, Hebrew university
 2003 – 2004 Visiting Professor, CIS Dept. University of Pennsylvania
 1998 – 2003 **Founding chair of the Computer Engineering program, Hebrew university.**
 1997 – 2000 Director of the Leibniz Research Center in Computer Science/
 1997 – 1998 Visiting Senior Scientist, NEC Research Institute, Princeton, New- Jersey
1995 – 1997 Associate professor, Computer Science, The Hebrew University.
1992 – 1995 Senior Lecturer, Computer Science, The Hebrew University
 1992 – 2002 Senior faculty, Computational Neuroscience course, Marine Biology
 Laboratories (**MBL**), **Woodshole**, MA (summers only).
 1992 – 2013 Founding member of the Interdisciplinary Center for Neural Computation
 (ICNC), HUJI.
1986 – 1991 Member of Research Technical Staff, Bell Laboratories, Murray Hill,
 New Jersey.
1985 – 1986 Post-doctoral fellow, MIT, Plasma Fusion Center and Physics Dept.
 Statistical physics of chaotic Hamiltonian systems (Chaim Weizman
 Fellow).

5. Other positions

2007-present Head of the Board of Directors, the Hebrew University Secondary School
 (Leyada)
 2008-present Member of the Board of “Azrieli Jerusalem College of Engineering”
 2007 Member of the international evaluation committee of the Finnish computer
 science institutes.
 2007-2012 Member of the Minerva foundation fellowship & grants committee
 2006-2011 Member of the German Bernstein computational neuroscience centers
 advisory board.
 2004, 2008 Visiting positions at the Kavili ITP at Santa Barbara (UCSB)
 2002-present Founding Member of “Machshava” forum.
 1997 Member of the Newton Institute at Cambridge Institute
 1980-1984 Teaching assistant, Physics Dept. & Talpiot, Hebrew University
 1974-1989 Research officer and section head, IDF (rank: major)
 1973-1974 Math. Teacher (Hebrew university Secondary School, “Leyada”)

2. Research topics:

Machine and statistical learning theory and applications; Statistical Mechanics; Theory of Dynamical Systems; Information Theory: Biological Information Processing and Learning Theory. Computational Neuroscience; Information theory of perception and action; Optimal Control, Computational Biology; Speech & Language; Signal Processing; Data Mining; Cyber Security.

Editorial boards (selected)

Scientific Reports (Nature)
Entropy
Neuroinformatics
Network: Computation in Neural Systems
Journal of Machine Learning Research (JMLR)
Neurocomputing,

Conference Chair, Organizer & Program Committees (selected):

Information, Control and Learning (ELSC, CSE & ISF, 2016)
ICPR (Program chair 1995)
NIPS (Program committee 1996, 1999)
NIPS Workshops (1996, 2000, 2002, 2009, 2010, 2013...)
ICML (Program committee 2002, 2010)
From Perception to Action & Back (IAS yearly program & 2 conferences, 2008-9.)
Music & Brain (2011)
Learning Days in Jerusalem (1993)
...

6. Honors & Grants**Awards:**

1. Landau Prize in Computer Science (2016)
2. PI, Intel Collaborative Research Institute in Computational Intelligence
3. Incumbent of the **Flinkman family Chair in Brain Research** (Since 2010)
4. IBM Faculty Award (2005,2006,2007)
5. Alon Fellowship (1991)
6. Chaim Weizman postdoctoral fellowship (1985)
7. Eliyahu Golomb Israel's Security Award (1980)

Research grants and centers PI:

1. [2011-...] PI, Intel Collaborative Research Institute in Computational Intelligence
2. [2012-...] Director of MOST knowledge Center in ML & AI
3. [2011-2015] DARPA MSEE grant (w S Soatto, A Krause, R Murray, A Censi) 10M\$.
4. [2011-2017] ISF Center of Excellence grant (with A. Globerson, G. Elidan, N. Friedman, Y. Weiss). Total 5,000,000 NIS.
5. [2009-2012] ISF Bikura 942/09 grant (with Merav Ahissar) (180,000\$)
6. [2008-2010] Complexity Science grant (with Israel Nelken and Merav Ahissar) (90,000\$).
7. [2007-2008] NATO SfP BESAFE CBM.MD.SFPP-982480 grant, with Rita Cucchiara (UNIMORE). Total 200,000 Euro. For 2 years.
8. [2007] BINCA Grant on "The Prehistory of the Hebrew Language". With: N. Agmon, Anna Balfer-Cohen, and Steven Fassberg.
9. [2005-2008] IBM Faculty Award
10. [11/2000 – 9/2005] Neuronal representation of voluntary complex movements in the primary motor cortex, Israel science foundation (8006/00-1) excellence research center with H. Bergman, E. Vaadia, M. Abeles, H. Sompolinsky, \$1,400,000,

11. [2003-2004] Nano-Biomolecular Computers. Israel's Ministry of Science and Technology. with Ehud Shapiro (2 years)
12. [2002-2004] Computational methods in whole genome analysis. Israel's Ministry of Science and Technology. With H. Margalit, N Friedman, N Linial, M. Linial.
13. [11/1998-8/2002:] Human Frontiers Science Project (HFSP). Discriminating Foreground and Background Sounds at Multiple Levels of the Brain. With Eric Young, Israel Nelken, Ad Artsen. (\$650,000 for 3 years)
14. [9/1999-8/2002:] US-Israel Binational Science Foundation (BSF). Extracting relevant information: An information theoretic approach to neural codes and language modeling. With William Bialek and Fernando C. Pereira (\$60,000 for 3 years)
15. [8/1998-9/2002:] Israel's Ministry of Science and Technology. Internet and Intranets: Heterogeneous Information Sources and Digital Libraries. With C. Beeri, G. Alber, R. El-Yaniv, T. Milo, Y. Sagiv, and O. Shmueli. (1,200,000 NIS per year).
16. [9/1997-8/2000:] Israeli Academy of Science, Analysis of cortical recordings using Hidden Markov Models (\$70,000)
17. [1/1997-12/2000:] German-Israel Science Foundation (GIF). Self-organization and Learning from Examples via Statistical Computational Processes. With E. Shamir S. Ben-David, J. Bhumann, H.U. Simon. (Hebrew University part per year: 52,500DM)
18. [12/1996-11/97:] France-Israel Scientific Collaboration (AFIRST). High level structuring and intelligent content based retrieval. With Xavier Rodet and Shlomo Dubnov, IRCAM, Paris. (\$27,000)
19. [8/1995-11/98:] Israel's Ministry of Science and Technology. Intelligent Utilization of Heterogeneous Information Sources and Digital Libraries. With C. Beeri, G. Alber, T. Milo, Y. Sagiv, and O. Shmueli. (735,000 NIS for this period). Extended for another year.
20. [7/1995-6/96:] Israel Defense Ministry, Parallel ATR and clustering methods.} (with S. Peleg, M. Werman and D. Weinshall, \$74,650).
21. [9/1995-8/98:] US-Israel Binational Science Foundation (BSF). Statistical Learning in Natural Language Modeling . With Fernando C. Pereira, AT&T Bell Laboratories (\$50,000)
22. [1993-6:] Israel Ministry of Science and Technology. Learning and Adaptation in Man-Machine Communication} (\$30K a year)
23. [1992-4:] Hungary-Israel scientific collaboration. Support for travel and joint research in Learning in Neural Networks. With Geza Gyorgyi, Etvos University.
24. [1992-3:] Support for research in Cursive Handwriting Recognition, under contract with Yissum and ART (Advance Recognition Technology Ltd. Tel-Aviv) (\$30K a year).
25. [1992-3:] Research grant for learning laboratory and research. Center for Neural Computation. With Haim Sompolinsky and Shaul Hochstein. (\$100K).
26. Goldberg foundation. Support for research on man-machine interaction. (\$30 for 3 years).
27. [1992-5:] Israeli Academy of Science (ISF), Learning Invariants in Visual and Temporal Pattern Recognition}, with Daphna Weinshall (\$50K for 3 years).
28. [1992:] Basic Research Foundation (VATAT), (\$100K)
29. [1991-4:] US-Israel Bi-National Science Foundation (BSF), Statistical Methods in Machine Learning, with Eli Shamir, David Haussler and Manfred Warmuth (\$64K for 3 years).

Invited Lectures & Tutorials (recent, selected):

ITW May 2015 (Jerusalem)
 EU NETADIS Feb 2015, Workshop on Biological networks, (Bardonecchia, Italy)
 Information Theory in Biology, Sep. 2014 (Banff Center, Canada)
 NIPS 2014 Workshop on Novel Trends and Applications in RL (Montreal)
 ECML Sep 2013 (Prague)

ITW May 2013 (Seville)
 NIPS 2013 Workshop on Planning with Information Constraints (Montreal)
 Statistical physics of inference and control, Sep. 2012 (Granada)
NIPS Tutorial, 2012 (Granada).
 ITA 2008,2010, 2012 (UCSD)
 Gatsby CNS Tri-Center 2013, 2014, 2015 (London, NY, Jerusalem)

8. Alumni Graduate Students and Postdocs:

- [Roy Fox](#) (PhD 2016)
- [Nori Jacoby](#) (PhD-2014, Co-advisor: Merav Ahissar)
- [Asaf Gal](#) (PhD-2013, Co-Advisor: Shimon Marom)
- [Jonathan Rubin](#) (PhD-2013, Co-advisor: Israel Nelken)
- [Sivan Sabato](#) (PhD-2012)
- [Yuval Tassah](#) (PhD-2012, Advisor: Emo Todorov)
- [Ohad Shamir](#) (PhD-2011)
- [Naama Parush](#) (PhD, 2010, Co-advisor: Hagai Bergman)
- [Yevgeny Seldin](#) (PhD, 2010)
- [Eyal Krupka](#) (PhD 2008)
- [Amir Navot](#) (PhD 2006)
- [Ran Gilad-Bachrach](#) (PhD 2005)
- [Amir Globerson](#). (PhD 2005) (Co-advisor: [Eilon Vaadia](#))
- [Yacov Engel](#) (PhD 2005) (Co-advisor: [Ron Meir](#))
- [Shmuel Brody](#) (MSc 2005)
- [Amit Rosner](#) (Co-advisor: [Udi Shapiro](#))
- [Gill Bejerano](#) (PhD 2003. Co-advisor: [Hanah Margalit](#))
- [Gal Chechik](#) (PhD 2003. Co-advisor: [Eli Nelken](#))
- [Noam Slonim](#) (PhD 2002)
- [Elad Schneidman](#) (PhD 2001. Co-advisor: [Idan Segev](#))
- [Adi Schreiber](#) (MSc 2000)
- [Shai Fine](#) (MSc 1996, PhD 1999)
- [Itay Gat](#) (MSc 1995, PhD 1999. Co-advisor: [Moshe Abeles](#))
- [Golan Yona](#) (PhD 1998. Co-advisors: [Nati](#) & [Michal Linial](#))
- [Lidror Troyansky](#) (PhD 1997)
- [Shlomo Dubnov](#) (PhD 1996. Co-advisor: Dalia Cohen)

- Dana Ron (PhD 1995)
- Yoram Singer (PhD 1995)
- Pedro Ortega (Postdoc, 2012)
- Michal Rosen-Zvi (IBM, PostDoc 2004-2005)
- Jan Stiller (Postdoc 2000)
- Shahar Mendelson (Postdoc 1999)
- Ran El-Yaniv (Postdoc 1996-98)