

# Curriculum Vitae

Ramūnas Girdziušas  
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[aabbtree77.github.io/](https://aabbtree77.github.io/)

## 1 Education

- 1995-1999      B.Sc. (Electrical Engineering), Vilnius Gediminas Technical University.  
1999-2008      M.Sc. (Tech.), D.Sc. (Tech.), Helsinki University of Technology.

## 2 Employment

- 01.02.2014-Now    Self-Funded.  
01.02.2013-31.01.2014    Faculty of Informatics at the University of Lugano, Via Giuseppe Buffi 13, CH-6904 Lugano, Switzerland.  
01.09.2011-31.12.2012    DEMO, École Nationale Supérieure des Mines de Saint-Étienne, 158 cours Fauriel, 42023 Saint-Étienne, CEDEX2, France.  
01.09.2008-31.08.2009    Department of Neurobiology at the University of California, Los Angeles, 73-235 CHS, Los Angeles, CA 90095-1763.  
01.05.2000-31.07.2008    Faculty of Information and Natural Sciences at Helsinki University of Technology, P.O.Box 5400 (Konemiehentie 2), FI-02015, Finland.

## 3 Publications

1. D. Boscaini, R. Girdziušas, and M. M. Bronstein (2014). "Coulomb shapes: using electrostatic forces for deformation-invariant shape representation." *Eurographics W. 3D Object Retrieval*. [diglib.org/handle/10.2312/3dor.20141044.009-015](https://diglib.org/handle/10.2312/3dor.20141044.009-015).
2. R. Girdziušas, J. Janusevskis, and R. Le Riche (2012). "On integration of multi-point improvements." *NIPS W. Bayesian Opt. Dec. Making*. [www.emse.fr/~leriche/integ\\_multiEI\\_nips2012\\_final.pdf](http://www.emse.fr/~leriche/integ_multiEI_nips2012_final.pdf).
3. R. Le Riche, R. Girdziušas, and J. Janusevskis (2012). "A Study of Asynchronous Budgeted Optimization." *NIPS W. Bayesian Opt. Dec. Making*. [www.emse.fr/~leriche/synchro\\_asynchro\\_final.pdf](http://www.emse.fr/~leriche/synchro_asynchro_final.pdf).
4. R. Girdziušas, R. Le Riche, et al. (2012). "Parallel Budgeted Optimization Applied to the Design of an Air Duct." [hal.archives-ouvertes.fr/hal-00723427](https://hal.archives-ouvertes.fr/hal-00723427).
5. R. Le Riche, R. Girdziušas, D. Villanueva, et al. (2012). "Squaring the engineering optimization circle: Distributed global optimization algorithms for compu-

tationally expensive problems." [www.emse.fr/~leriche/rio2012\\_LeRiche.pdf](http://www.emse.fr/~leriche/rio2012_LeRiche.pdf).

6. J. Janusevskis et al. (2012). "Expected Improvements for the Asynchronous Parallel Global Optimization of Expensive Functions: Potentials and Challenges." *LNCS*. vol. 7219, pp. 413–418.
7. R. Girdziušas and D. Ringach (2009). "The Jacobian Singularity in the Thomson Problem. Unpublished." [aabbtree77.github.io/pdfs/ucla2009.pdf](https://aabbtree77.github.io/pdfs/ucla2009.pdf).
8. R. Girdziušas (2008). "Stability and Inference in Discrete Diffusion Scale-Spaces. DSc (PhD) thesis, 2008." [aaltodoc.aalto.fi/handle/123456789/2999](https://aaltodoc.aalto.fi/handle/123456789/2999). Advisors: E. Oja and J. Laaksonen (Helsinki Univ. of Tech.). External examiners: S. Siltanen (Tampere Univ. of Tech.) and K. Ruotsalainen (Univ. of Oulu). Opponents: S. Siltanen and A. Gotchev (Tampere Univ. of Tech.).
9. R. Girdziušas and J. Laaksonen (2007b). "When Is a Discrete Diffusion a Scale-Space?" *ICCV*. [dx.doi.org/10.1109/ICCV.2007.4408895](https://dx.doi.org/10.1109/ICCV.2007.4408895).
10. R. Girdziušas and J. Laaksonen (2007a). "How Marginal Likelihood Inference Unifies Entropy, Correlation and SNR-based Stopping in Nonlinear Diffusion Scale-Spaces." *LNCS*. vol. 4843, pp. 811–820.
11. R. Girdziušas and J. Laaksonen (2005b). "Jacobi Alternative to Bayesian Evidence Maximization." *LNCS*. vol. 3697, pp. 247–252.
12. R. Girdziušas and J. Laaksonen (2005e). "Use of Input Deformations with Brownian Motion." *LNCS*. vol. 3686, pp. 219–228.
13. R. Girdziušas and J. Laaksonen (2005d). "Optimal Stopping and Constraints for Diffusion Models of Signals with Discontinuities." *LNAI*. vol. 3720, pp. 576–583.
14. R. Girdziušas and J. Laaksonen (2005c). "Optimal Ratio of Lamé Moduli with Application to Motion of Jupiter Storms." *LNCS*. vol. 3540, pp. 1096–1106.
15. R. Girdziušas and J. Laaksonen (2005a). "Gaussian Processes of Nonlinear Diffusion Filtering." *IJCNN*, pp. 1012–1017. [dx.doi.org/10.1109/IJCNN.2005.1555991](https://dx.doi.org/10.1109/IJCNN.2005.1555991).
16. R. Girdziušas and J. Laaksonen (2004). "Gaussian Process Regression with Fluid Hyperpriors." *LNCS*. vol. 3316, pp. 567–572.
17. M. Aksela et al. (2003). "Methods for Adaptive Combination of Classifiers." *IJDAR* vol. 6.1, pp. 23–41.
18. M. Aksela et al. (2002). "Class-Confidence Critic Combining." *IWFHR*, pp. 201–206. [dx.doi.org/10.1109/IWFHR.2002.1030909](https://dx.doi.org/10.1109/IWFHR.2002.1030909).
19. R. Girdziušas (2001). "Discriminative Online Recognition of Isolated Handwritten Characters. MSc thesis. Helsinki Univ. of Tech."
20. R. Girdziušas and J. Laaksonen (2001). "Multilayer Perceptron Approach to Non-Rigid Image Matching." *ICONIP*. vol. 1, pp. 491–496.

## 4 Talks

- Presentations: ICONIP 2001, 2004; ICAPR 2005; ICANN 2005; OMD2 meetings (Paris 2011, 2012).
- Posters: SCIA 2005; IJCNN 2005; ECML 2005; ICCV 2007; ACCV 2007.
- Invited talk at the DIKU group, the University of Copenhagen, 2008.

## 5 Awards

01.09.1999- 01.06.2000	Nokia scholarship (Natalia Kantola, Robertas Tamulevičius).
01.01.2002- 01.07.2006	ComMIT grant (postgraduate studies).
09.11.2005- 09.15.2005	ICANN travel grant.
07.01.2006- 12.01.2006	HUT scholarship.
01.22.2008- 01.24.2008	Travel grant (Prof. Mads Nielsen).
04.03.2008:	Doctoral thesis award: "Pass with Distinction".

## 6 Recommendation Letters

- Prof. Erkki Oja, Konemiehentie 2, P.O. Box 5400, 02015 HUT, Finland.  
Email: Erkki.Oja@hut.fi, phone: +358-9-451 3265, fax: +358 9 451 3277.
- Doc. Jorma Laaksonen, Konemiehentie 2, P.O. Box 5400, 02015 HUT, Finland.  
Email: Jorma.Laaksonen@hut.fi, phone: +358-9-451 3269, fax: +358 9 451 3277.
- Prof. Dario Ringach, Dep. of Neurobiology, UCLA, Los Angeles, CA 90095-1563.  
Email: dario@ucla.edu, phone: +310 825 6606.
- Doc. Rodolphe Le Riche, DEMO, 158 cours Fauriel, 42023 Saint-Étienne, CEDEX 2.  
Email: leriche@emse.fr, phone: +336 31 262 678.
- Prof. Michael M. Bronstein, SI-109, Via Giuseppe Buffi 13, 6904, Lugano, Switzerland.  
Email: michael.bronstein@usi.ch, phone: +41 58 666 4120.
- Saulius Rakauskas (senior electronics engineer at Infovega, retired). Antakalnio 48-16, LT-10304, Vilnius, Lietuva.  
Email: radiomtx@gmail.com, phone: +370 652 42317.

## 7 Code

C, avr-gcc	<a href="https://github.com/aabbtree77/adast">github.com/aabbtree77/adast</a> <a href="https://github.com/aabbtree77/atmega8-ssd1306-ds18b20-dht22">github.com/aabbtree77/atmega8-ssd1306-ds18b20-dht22</a> <a href="https://github.com/aabbtree77/digispark-attiny85-command-line">github.com/aabbtree77/digispark-attiny85-command-line</a>
Go, Python	<a href="https://github.com/aabbtree77/esp32-vpn">github.com/aabbtree77/esp32-vpn</a> <a href="https://github.com/aabbtree77/MNIST-0.17">github.com/aabbtree77/MNIST-0.17</a> (fork)
Go, Nim, cpp11	<a href="https://github.com/aabbtree77/twinpeekz">github.com/aabbtree77/twinpeekz</a> <a href="https://github.com/aabbtree77/twinpeekz2">github.com/aabbtree77/twinpeekz2</a> <a href="https://github.com/aabbtree77/premaxwell">github.com/aabbtree77/premaxwell</a>
MERN	<a href="https://github.com/aabbtree77/law2">github.com/aabbtree77/law2</a> <a href="https://github.com/aabbtree77/miniguestlog">github.com/aabbtree77/miniguestlog</a> <a href="https://github.com/aabbtree77/cv">github.com/aabbtree77/cv</a> <a href="https://github.com/aabbtree77/auth-starter-frontend">github.com/aabbtree77/auth-starter-frontend</a> <a href="https://github.com/aabbtree77/auth-starter-backend">github.com/aabbtree77/auth-starter-backend</a>
SQLite	<a href="https://github.com/aabbtree77/imdb-sqlite-queries">github.com/aabbtree77/imdb-sqlite-queries</a>
LaTeX	<a href="https://github.com/aabbtree77/rgresume">github.com/aabbtree77/rgresume</a>

## 8 Bug Fixes

Cross-Compilation	<a href="https://github.com/Max1412/Graphics2/issues/24">github.com/Max1412/Graphics2/issues/24</a>
OpenGL	<a href="https://github.com/go-gl/gl/issues/128">github.com/go-gl/gl/issues/128</a>
Screen Tearing	<a href="https://github.com/godlikepanos/anki-3d-engine/issues/59">github.com/godlikepanos/anki-3d-engine/issues/59</a>
Deep Copying	<a href="https://github.com/polydojo/jispy/issues/1">github.com/polydojo/jispy/issues/1</a>
Wine vs dxvk	<a href="https://github.com/doitsuvin/dxvk/issues/3789">github.com/doitsuvin/dxvk/issues/3789</a>

## 9 Blog Articles

K155 Hardware	<a href="https://github.com/aabbtree77/K155-clock">github.com/aabbtree77/K155-clock</a>
Tensor algebra	<a href="https://aabbtree77.github.io/tensors/">aabbtree77.github.io/tensors/</a>

## 10 Additional Information

Date of Birth	30.12.1977 (Gen X, He/Him)
Citizenship	Lithuanian (Lithuania, European Union)
Languages	English (7/10), Russian (8/10), Lithuanian (9/10)
Driver's Licence	B
Sports	2318 (hyperboloid777 @ lichess), Kyokushin 2nd belt (1993)
Erdős Number	5 (Bollobas - Mannila - Bingham - Oja) 4 (Odlyzko - Guibas - Bronstein)
Favorite Art	Ole Rømer (1676)
	The Nutcracker and the Mouse King (1816)
	Arago spot (1818)
	The Cold Heart (1827)
	Пиковая дама (1834)
	The Steadfast Tin Soldier (1838)
	The Little Match Girl (1845)
	Toilers of the Sea (1866)
	Бесы (1872)
	Sophus Lie (1888)
	Hunger (1890)
	The Nutcracker (1892)
	Пётр Лебедев (1899)
	The Last Leaf (1905)
	The Gift of the Magi (1905)
	The Catcher in the Rye (1951)
	Balta drobulė (1958)
	Pound - Rebka (1960)
	The Moviegoer (1961)
	Picnic at Hanging Rock (1975)
	Le jouet (1976)
	Девочка и дельфин (1979)
	Blade Runner (1982)
	Šaunusis ketvertukas prasmegusioje pilyje (1988)
	Fascination Street (1989)
	Twin Peaks (1990)
	Lemon (1993)
	I'm Deranged (1995)
	Marie Baie des Anges (1997)
	Shabondama Elegy (1999)
	П.А. Жилин (2003)
	Kung Fu Hustle (2004)
	<a href="https://github.com/rui314/chibicc">github.com/rui314/chibicc</a> (2020)