

Max Murakami



Personal Information

Address Herborner Straße 62
60439 Frankfurt am Main

Telephone 01575 4868775

E-mail murakami@fias.uni-frankfurt.de

Nationality German

Birthday/place 14.5.1988 in Tokyo

Education

PhD

2014-2017 **Physics**, *Goethe University*, Frankfurt am Main.

- Research area: Computational Neuroscience
- „A Neuronal Model of Gaze-Contingent Learning”
- Supervisor: Prof. Dr. Jochen Triesch

Studies

2012-2014 **Physics M.Sc.**, *Goethe University*, Frankfurt am Main.

- Minor: Japanese Studies
- Specialization: Computational Neuroscience
- Master thesis *Listen and Babble: A Model of Vowel Acquisition Based on Imitation Learning* with Prof. Dr. Jochen Triesch, grade 1,0
- Final grade: 1,0 with distinction

2008-2012 **Physics B.Sc.**, *Goethe University*, Frankfurt am Main.

- Minor: Japanese Studies
- Bachelor thesis *Effects of Transcranial Magnetic Stimulation on different-sized neurons* with Prof. Dr. Jochen Triesch, grade 1,0
- Final grade: 1,6

School Education

1998-2007 **Abitur**, *Reichsstadt-Gymnasium*, Rothenburg ob der Tauber.

- Advanced subjects: Mathematics and Physics
- Graduation thesis: *Principles of Data Compression*
- Final grade: 1,7

Job Experience

- since 2017 **CID, Solution Architect**, Freigericht.
Team lead and software development coordination.
- 2014-2017 **Frankfurt Institute for Advanced Studies, Scientific Assistant**,
Frankfurt am Main.
Research for DFG project *Gaze-Contingent Learning in Infants* and for EU project *Goal-based Open-ended Autonomous Learning Robots*.
- 2013-2014 **Frankfurt Institute for Advanced Studies, Webdesigner**, Frankfurt am Main.
Website maintenance of the Triesch lab.
- 2008 **C.F. Maier, Internship**, Schillingsfürst.
Quality assurance.
- 2007-2008 **Verbundklinikum Landkreis Ansbach, Community service**, Rothenburg ob der Tauber.
Nursing and transporting surgical patients.
- 2005-2008 **TSV 2000 Rothenburg, Trainer**, Rothenburg ob der Tauber.
Badminton training for high school students and adults.

Teaching Experience

- 2016-2017 **seminar: Principles of Neural Science**,
Frankfurt Institute for Advanced Studies, Frankfurt am Main.
- 2014-2015 **tutorial: Theory of Special Relativity and Quantum Mechanics**,
Institute for Theoretical Physics, Goethe University, Frankfurt am Main.
- 2014 **tutorial: Electrodynamics**,
Institute for Theoretical Physics, Goethe University, Frankfurt am Main.
- 2012-2013 **tutorial: Mathematical Methods in Physics**,
Institute for Theoretical Physics, Goethe University, Frankfurt am Main.
- 2011 **tutorial: Classical Mechanics**,
Institute for Theoretical Physics, Goethe University, Frankfurt am Main.
- 2010-2011 **lab Classes**,
Institute for Applied Physics, Goethe University, Frankfurt am Main.

Publications

- 2015 **Seeing [u] aids vocal learning: babbling and imitation of vowels using a 3D vocal tract model, reinforcement learning, and reservoir computing**,
M. Murakami, B. Kröger, P. Birkholz, J. Triesch, IEEE International Conference on Development and Learning and Epigenetic Robotics (ICDL), 2015.
Conference paper
- 2014 **A Model of TMS-induced I-waves in Motor Cortex**,
C. Rusu, M. Murakami, U. Ziemann, J. Triesch, Brain Stimulation 7(3), 2014.

Conference Contributions

- 2016 **Look and Learn: A Computational Model of Gaze-Contingent Learning**,
M. Murakami, J. Bolhuis, T. Kolling, M. Knopf, J. Triesch, IEEE International
Conference on Development and Learning and Epigenetic Robotics (ICDL), 2016.
Poster
- 2015 **Seeing [u] aids vocal learning: babbling and imitation of vowels using a 3D
vocal tract model, reinforcement learning, and reservoir computing**,
M. Murakami, B. Kröger, P. Birkholz, J. Triesch, IEEE International Conference on
Development and Learning and Epigenetic Robotics (ICDL), 2015.
Talk

IT and Programming

PYTHON, C/C++/C#, JAVA, Matlab, \LaTeX , HTML, NEURON, Maple, Microsoft
Office, Linux, Microsoft Windows. . .

Languages

German native speaker
English business fluent
Japanese advanced (JLPT 3 kyū)
French advanced
Korean basic

Awards

- 2007 Von Staudt Award for best mathematics A level.