Martin Schrimpf

E-Mail	msch@mit.edu	43 Vassar St
Mobile	+1 617-586-6748	Cambridge
Web	http://mschrimpf.com	MA 02139

Education

Since 2017	**Massachusetts Institute of Technology (MIT)**, *PhD program* Department of Brain and Cognitive Sciences. Advisor: James DiCarlo.
2014 - 2017	**TU & LMU Munich & University of Augsburg**, *Master of Science* Elite Program Software Engineering. GPA 4.0 w/ honors. Thesis completed at **Harvard University**.
2011 - 2014	**TU Munich**, *Bachelor of Science* Program Information Systems. Thesis completed at the **University of Sydney**.

Research and Industry Experience

2017	**Salesforce Einstein AI**, *Deep Learning Intern* Advisor: Richard Socher. Flexible architecture search for natural language processing with reinforcement learning and predictive function.
2016	**Harvard Medical School**, *Research Assistant* Advisor: Gabriel Kreiman. Recurrent computations for the recognition of occluded objects in humans and models; Robustness of neural networks to weight perturbations; Role of context for object recognition.
2015 - 2016	**Oracle Labs**, *Research Assistant* Development of an on-demand cluster database module.
Since 2015	**Integreat Digital Factory**, *Co-Founder / Technical Advisor (since 2017)* Digitization projects in social sector. Platform for local information distribution to refugees in dozen of German cities.
2012 - 2015	**Martin Schrimpf Software Solutions**, *Freelancer* Led the development of a document management system with optical character recognition to make the client company paper-free.
2015	**Siemens AG**, *Software Engineering Intern* Behavior-driven testing framework to run a test specification written in natural language.

Publications

2018	Bashivan, P., Schrimpf, M., Ajemian, R., Rish, I., Riemer, M. & Tu, Y. Continual Learning with Self-Organizing Maps. *Neural Information Processing Systems (NeurIPS) Continual Learning Workshop*
2018	Arend, L., Han, Y., Schrimpf, M., Bashivan, P., Kar, K., Poggio, T., DiCarlo, J. J. & Boix, X. Single units in a deep neural network functionally correspond with neurons in the brain: preliminary results. *CBMM Memo*
2018	Kubilius*, J., Schrimpf*, M., Nayebi, A., Bear, D., Yamins, D. L. K. & DiCarlo, J. J. CORnet: Modeling the Neural Mechanisms of Core Object Recognition. *bioRxiv*
2018	Schrimpf*, M., Kubilius*, J., Hong, H., Majaj, N. J., Rajalingham, R., Issa, E. B., Kar, K., Bashivan, P., Prescott-Roy, J., Schmidt, K., Yamins, D. L. K. & DiCarlo, J. J. Brain-Score: Which Artificial Neural Network for Object Recognition is most Brain-Like? *bioRxiv* (covered by *Science*)
2018	Schrimpf*, M., Merity*, S. & Socher, R. A Flexible Approach to Automated RNN Architecture Generation. *ICLR*
2018	Tang*, H., Schrimpf*, M., Lotter*, W., Moerman, C., Paredes, A., Ortega Caro, J., Hardesty, W., Cox, D. & Kreiman, G. Recurrent computations for visual pattern completion. *PNAS*
2017	Cheney*, N., Schrimpf*, M. & Kreiman, G. On the Robustness of Convolutional Neural Networks to Internal Architecture and Weight Perturbations. *CBMM Memo*
2016	Schrimpf, M., Tang, H., Lotter, W., Paredes, A., Ortega Caro, J., Hardesty, W., Cox, D. & Kreiman, G. Recurrent computations for pattern completion. *NIPS Brains and Bits Workshop*

Presentations

03/2019	**Center for Brain-Inspired Computing (C-BRIC)** Brain-Score: Which Artificial Neural Network for Object Recognition is most Brain-Like?
02/2019	**Computational and Systems Neuroscience (Cosyne)** Using Brain-Score to Evaluate and Build Neural Networks for Brain-Like Object Recognition
02/2019	**Center for Brains, Minds and Machines (CBMM)** Transforming machine learning models into brain models
09/2018	**Cognitive Computational Neuroscience (CCN)** Brain-Score: Which Artificial Neural Network Best Emulates the Brain's Neural Network?
02/2018	**Tenenbaum Lab, MIT** A Flexible Approach to Automated RNN Architecture Generation
12/2016	**Brains & Bits, NIPS Workshops** Recurrent computations for pattern completion

10/2016	**Systems Club, Harvard Medical School** Recurrent computations for pattern completion

Awards

2019	**Patrick J. McGovern**, *Travel award*
2018	**Google.org**, *Impact Challenge (Integreat)* [finalist, 250,000€]
2017	**MIT**, *Henry E. Singleton Fellowship* [tuition and stipend]
2017	**Council of Europe**, *European Youth Award (Integreat)* [winner]
2016	**DAAD German Academic Exchange Service**, *FITweltweit* [scholarship for research abroad]
2016	**University of Augsburg**, *Teilstipendium* [scholarship]
2016	**Government of Swabia**, *Integrationspreis (Integreat)* [competition winner]
2015	**Federal Ministry for Education and Research, Roland und Ute Lacher Fonds**, *Deutschlandstipendium* [scholarship]
2014	**Bavarian State Ministry**, *Ministeriumsstipendium* [scholarship]

Teaching

2019	**Harvard-MIT Computational Neuroscience Journal Club** Deep Networks and PyTorch
2019	**Neural Mechanisms of Cognitive Computation** Graduate course, Teaching Assistant
2017	**MIT BCS Peer Lectures** Introduction to Deep Learning

Service

2018	**CBMM (MIT & Harvard)**, *Trainee Leadership Council*
2016	**University of Augsburg**, *Organization of AI Workshop*
2015 - 2016	**TU Munich**, *MINGA Mentor for International Students*

Grant Writing

2019	**UG1 (Clinical Research)**, *Baylor + MIT*
2019	**IBM Large Project Proposal**, *MIT + IBM*