Henry George Wolf VII

Email henry.wolf@uconn.edu

Telephone +1.347.820.3462
Github github.com/aenrichus
Website chaoticneural.com
Twitter @chaoticneural

EDUCATION

2014-2018 $\,$ PhD in Language and Cognition, Certificate in the Neurobiology of Language

(est.) "Modeling Dyslexic Reading with Deep Neural Networks"

Supervised by Dr. Jay Rueckl

Université de Montréal, Deep Learning Summer School (2017) École Polytechnique, Data Science Summer School (2017) Soochow University, Critical Language Scholars Program (2015)

University of Connecticut

2009 – 2011 MA in Teaching English to Speakers of Other Languages

"Neural Development During Critical Periods in Second Language

Acquisition"

Supervised by Dr. William Snyder

Columbia University, Teachers College (Tokyo)

2002 – 2006 BS in International Business and Marketing

Participant in the 2004 Asia Study Abroad Program

University of Dayton

RESEARCH SUMMARY

My research involves the development of models of natural language on the computational, representational, and physical levels. These levels are correlates of my three main areas of focus: (1) Cognitive Science, i.e. modeling of language processing while reading, investigating language processing in second and third language acquisition; (2) Machine Learning, i.e. developing simulations of reading, including using deep neural networks to generate representations of language from text; (3) Neurobiology of Language, i.e. imaging language processing with fMRI.

AWARDS AND HONORS

Research Grants

2017 – 2018 Research Supplement to Support Diversity in Health-Related Fields

Financial and professional support to model dyslexia using deep learning valued at

\$102,144 over two years

U. S. National Institute of Health (NIH)

Grants, Fellowships, and Scholarships

2016 - 2021 Multicultural Scholars Award

(max.) Full-time financial and professional support including a \$24,060/year

stipend for up to five years and a full tuition waiver

University of Connecticut Graduate School

2016 Hardware for Computationally-Intensive Models of Language

Grant of \$9,000 awarded to acquire a computer system capable of 44 TFLOPS to be

used by the Deep Learning Research Group for computational modeling

University of Connecticut Institute of Brain and Cognitive Sciences

2015 Critical Language Scholarship

Full funding to attend a two-month intensive Chinese language course at Soochow University in China including a supplementary stipend of \$690

U. S. Department of State

2014 – 2016 Integrative Graduate Education and Research Traineeship (IGERT)

Fellow at the University of Connecticut IGERT in Language Plasticity including a \$30,000/year stipend for two years and a full tuition waiver

U. S. National Science Foundation (NSF)

PUBLICATIONS

Journal Articles

- Wolf VII, H., & Rueckl, J. (2017). Individual differences in sensitivity to homophony in visual word recognition. *Master's Theses*, 1130. http://opencommons.uconn.edu/gs_theses/1130
- Wolf VII, H., & Rueckl, J. (in preparation). Simulating dyslexia as spectra of impairment: an investigation of the effects of control parameters on model performance.
- Wolf VII, H. (in preparation). Generating orthographic representations from images of text using a simulation of lexical decision and syllabification.
- Wolf VII, H. (in preparation). Writing systems and developmental dyslexia: a review.
- Wolf VII, H. (in preparation). Applications of deep learning for psycholinguistics: a review.

Books

- Bartelen, H., Kostiuk, M., & Wolf, H. G., VII (2014). Great presentations 2: Plan, present and communicate. Tokyo: R.I.C Publications.
- Bartelen, H., Kostiuk, M., & Wolf, H. G., VII (2013). Great presentations 1: Plan, present and communicate. Tokyo: R.I.C Publications.

Conference Presentations

Wolf, H. G., VII, & Rueckl, J. (2017). Parametrically modeling individual differences in developmental dyslexia. Presented at the Society for the Scientific Study of Reading.

- Halifax, Canada, July 15, 2017.
- Rueckl, J. G., Li, T., Sawi, O., Wolf, H. G., VII, Brown, J. M., & Zevin, J.D. (2015). Individual differences in skilled word reading. Presented at the International Meeting on Reading in Different Orthographies. San Sebastián, Spain, June 28, 2015.
- Wolf, H. G., VII. (2012). Effects of teacher self-observation through recording and transcription. Presented at the Japan Association of Language Teachers (JALT) Conference, 2012.
- Bartelen, H., Kostiuk, M., & Wolf, H. G., VII. (2012) Teaching speaking via presentations and speeches. Presented at the English Teachers in Japan (ETJ) Tokyo Expo, 2012.
- Wolf, H. G., VII. (2011). Blogging and extensive reading in the English as a Foreign Language classroom. Presented at the JALT Conference Graduate Student Showcase, 2011.

Conference Posters

- Wolf, H. G., VII. (2017). Orthographic representation learning for modeling dyslexia. To be presented at the annual conference on Neural Information Processing Systems 2017, Long Beach, CA.
- Wolf, H. G., VII. (2017). Simulating individual differences in reading acquisition using convolutional neural networks. Presented at the Data Science Summer School 2017, Palaiseau, France.
- Wolf, H. G., VII. (2017). Simulating individual differences in reading acquisition using deep learning. Presented at the Deep Learning Summer School 2017, Montreal, QC, Canada.
- Wolf, H. G., VII, & Rueckl, J. (2015). Individual differences in homophone and pseudohomophone effects. Presented at the annual LangFest 2015, Storrs, CT.

Conference Papers

Wolf, H. G., VII, & Grissom, A., II. (in preparation). Counting strokes in Chinese characters. Submitted to the annual conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies 2018, New Orleans, LA.

EXPERIENCE

Research

2014 – 2018 Doctoral Research
 (est.) University of Connecticut, Storrs
 2016 – 2016 Statistics Consultant
 University of Connecticut, Storrs
 2010 – 2013 Independent Research
 Kanda Institute of Foreign Languages, Tokyo

Teaching 2013 – 2014	Adjunct Instructor New York University, American Language Institute, Tokyo
2012 – 2014	English Teacher Kudan Institute of English, Tokyo
2012 – 2013	Teaching Assistant Columbia University, Teachers College, Tokyo
2009 – 2014	English Teacher Kanda Institute of Foreign Languages, Tokyo
2009 – 2014	English Teacher Tokyo YMCA International School, Tokyo
2008 – 2012	English Teacher FEN Foreign Academy, Saitama
2008 – 2009	Assistant English Teacher Shiki City Board of Education, Saitama
2007 – 2008	English Teacher Chosun Ilbo Delicious English, Gyeonggi
2006 – 2007	Assistant Language Teacher Participant in the Japan Exchange and Teaching Program Yokote City Board of Education, Akita
SERVICE	
Conference 2012	Positions Conference Co-Chair National JALT CALL Conference
Academic Committees	
2016 – 2018 (est.)	Founder Deep Learning Research Group University of Connecticut, Storrs
2015 – 2016	Founder Data Science Research Group University of Connecticut, Storrs
2015 – 2016	Event Coordinator Language and Cognition Department University of Connecticut, Storrs

2014 – 2018 Organizing Member

(est.) IGERT International Research Committee

University of Connecticut, Storrs

2014 - 2018 Member

(est.) IGERT J-Term Organization Committee

University of Connecticut, Storrs

Professional Societies

2017 - PRES Member

Society for the Scientific Study of Reading

2014 – 2015 Member

American Psychological Society

2011 – 2014 Member

Japan Association of Language Teachers

TECHNICAL SKILLS

Natural Languages

English Native

Chinese Upper-Intermediate

ACTFL Oral Proficiency Interview: Intermediate-High

Passed Hanyu Shuiping Kaoshi (HSK): Level 3

Passed Spoken Hanyu Shuiping Kaoshi (HSKK): Level 1

Studied independently and at Soochow University

Japanese Upper-Intermediate

Studied independently while living in Japan from 2006 – 2014

French Novice

Spanish Novice

Programming Languages

Python Intermediate

Studied independently

Used heavily for deep learning modeling of language

R Advanced

Studied independently and at the University of Connecticut

Used heavily for research data analysis

SQL Intermediate

Studied independently

REFERENCES

Dr. Jay Rueckl

Associate Professor and MRI Center Director, University of Connecticut

Email jay.rueckl@uconn.edu Telephone +1.860.486.5502

Dr. William Snyder

Assistant Director of TESOL MA Program, Kanda University of International Studies

Email snyder-w@kanda.kuis.ac.jp

Telephone +81.3.3254.3586

Dr. Vivian Lindhardsen

Adjunct Associate Professor of Applied Linguistics and TESOL, Columbia University (TC)

Email lindhardsen@tc.edu Telephone +1.212.678.8358