

Dale Zhou

CONTACT INFORMATION

Complex Systems Lab
Hayden Hall 311,
244 S 33rd St
Philadelphia, PA 19104

<https://dalezhou.com>
dalezhou@penmedicine.upenn.edu
dalejn@gmail.com

EDUCATION

University of Pennsylvania
Ph.D. candidate in [Neuroscience](#)
Thesis advisors: Danielle Bassett and Theodore Satterthwaite

University of Maryland, College Park
B.A. in Philosophy, *honors*
B.Sc. in Psychology, *honors*
Minor in Neuroscience

Publications

SUBMITTED

- [9] **Zhou, D.**, Lydon-Staley, D.M., Zurn, P., & Bassett, D.S. (2020, under review at Current Opinion in Behavioral Sciences). *The growth and form of knowledge networks by kinesthetic curiosity*. arXiv. [arXiv:2006.02949](#)
- [8] **Zhou, D.**, Lynn, C.W., Cui, Z., Ciric, R., Baum, G.L., Moore, T.M., Roalf, D.R., Detre, J.A., Gur, R.C., Gur, R.E., Satterthwaite, T.D., & Bassett, D.S. (2020, under revision at Nature Neuroscience). *Efficient Coding in the Economics of Human Brain Connectomics*. biorxiv. DOI: [10.1101/2020.01.14.906842](#)
- [7] Lydon-Staley, D.M., **Zhou, D.**, Blevins, A.S., Zurn, P., & Bassett, D.S. (2019, under revision at Nature Human Behavior). *Hunters, busybodies, and the knowledge network building associated with curiosity*. PsyArXiv. DOI: [10.31234/osf.io/undy4](#)

JOURNAL ARTICLES

- [6] Chai, L.R., **Zhou, D.**, & Bassett, D.S. (2019) *Evolution of semantic networks in biomedical texts*. Journal of Complex Networks. DOI: [10.1093/comnet/cnz023](#)
- [5] **Zhou, D.**, Liu, S., Zhou, X., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2018) *7 Tesla MRI reveals hippocampal structural abnormalities associated with memory intrusions in childhood-onset schizophrenia*. Schizophrenia Research. DOI: [10.1016/j.schres.2018.07.023](#)
- [4] **Zhou, D.**, Gochman, P., Broadnax, D.D., Rapoport, J.L., & Ahn, K. (2016). *15q13.3 duplication in two patients with childhood-onset schizophrenia*. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics. DOI: [10.1002/ajmg.b.32439](#)

REVIEWS/BOOK CHAPTERS

- [3] Srivastava, P., Nozari, E., Kim, J.Z., Ju, H., **Zhou, D.**, Becker, C., Pasqualetti, F., & Bassett, D.S. (2020, in press). *Models of communication and control for brain networks: distinctions, convergence, and future outlook*. Network Neuroscience. [arXiv:2002.07029](#)
- [2] Rapoport, J. L., **Zhou, D.**, & Ahn, K. (2020). *Intellectual disabilities*. New Oxford Textbook of Psychiatry, 3rd edition. Oxford University Press, USA. ISBN: 9780198713005

- [1] **Zhou, D.**, Sequeira, S., Driver, D., & Thomas, S. (2018). *Disruptive Mood Dysregulation Disorder*. In S. Thomas and D. Driver (Eds.), *Complex Disorders in Pediatric Psychiatry: A Clinician's Guide*. Clinics Review Articles, Elsevier Inc. ISBN: 9780323511476

Conference Presentations

TALKS

- [2] National Academy of Sciences Colloquium: The Brain Produces the Mind By Modeling (2019). *Network Mechanisms of Curiosity and Information Seeking During Wikipedia Exploration*. Irvine, California.
- [1] Annual Julius Axelrod Symposium (2017). *Ultra-high field 7-Tesla MRI reveals hippocampal subfield volume and shape abnormalities in childhood-onset schizophrenia patients compared to healthy siblings and controls*. NIMH, Intramural Research Program. Bethesda, Maryland.

ABSTRACTS

- [7] **Zhou, D.**, Lynn, C.W., Cui, Z., Ciric, R., Baum, G.L., Moore, T.M., Roalf, D.R., Detre, J.A., Gur, R.C., Gur, R.E., Satterthwaite, T.D., & Bassett, D.S. (2020). *Efficient Coding in the Economics of Human Brain Connectomics*. Organization of Human Brain Mapping. Montreal, CA.
- [6] **Zhou, D.**, Lydon-Staley, D., Zurn, P., Bassett, & D.S. (2019). *Network Mechanisms of Curiosity and Information Seeking During Wikipedia Exploration*. Sackler Colloquium: The Brain Produces the Mind By Modeling, Beckman Center of the National Academy of Sciences & Engineering, Irvine, California.
- [5] **Zhou, D.**, Liu, S., Zhou, X., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2017). *Ultra-high field 7-Tesla MRI reveals hippocampal subfield volume and shape abnormalities in childhood-onset schizophrenia patients compared to healthy siblings and controls*. Julius Axelrod Symposium, Bethesda, Maryland.
- [4] **Zhou, D.**, Liu, S., Zhou, X., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2017). *Ultra-High Field 7-Tesla MRI Shape Analysis of Hippocampal Subfields in Childhood-Onset Schizophrenia and Healthy Siblings*. Society for Biological Psychiatry, San Diego, California.
- [3] **Zhou, D.**, Liu, S., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2016). *7-Tesla MRI Reveals Regional Hippocampal Deficits in Childhood-Onset Schizophrenia*. American College of Neuropsychopharmacology, Hollywood, Florida. In *Neuropsychopharmacology*, Vol. 41, pp. S591-S591.
- [2] **Zhou, D.**, Liu, S., Berman, R.A., Broadnax, D.D., Rapoport, J.L., & Thomas, A.G. (2016). *7-Tesla MRI reveals regional hippocampal volume deficits of dentate gyrus in childhood-onset schizophrenia*. Society for Neuroscience, San Diego, California.
- [1] **Zhou, D.**, Gochman, P., Broadnax, D.D., Rapoport, J.L., & Ahn, K. (2016). *15q13.3 duplication in two patients with childhood-onset schizophrenia*. Society of Biological Psychiatry, Atlanta, Georgia.

Open-source Software & Notebooks

- [3] **Zhou, D.**, Cornblath, E.J., Stiso, J., Teich, E.G., Dworkin, J.D., Blevins, A.S., & Bassett, D.S. (2020). *Gender Diversity Statement and Code Notebook v1.0 (Version v1.0)*. Zenodo. DOI: [10.5281/zenodo.3672110](https://doi.org/10.5281/zenodo.3672110)
- [2] **Zhou, D.** (2018). *Building word2vec and Co-Occurrence Networks*, [link](#)
- [1] Gorgolewski, K.J., Esteban, O., [110 others, including **Zhou, D.**], & Ghosh, S. (2016). *Nipype: a flexible, lightweight and extensible neuroimaging data processing framework in Python. 0.13.0*. DOI: [10.5281/zenodo.581704](https://doi.org/10.5281/zenodo.581704)

Honors

2018-	Language and Communication Sciences Program
2015	Departmental Honors in Psychology
2015	Departmental Honors in Philosophy
2010-12	College Park Scholar in Global Public Health

Funding

2015-17	NIH Intramural Research Training Award
2010-14	University of Maryland President's Scholarship

Small Grants

2020	Graduate Student Technology Grant
2018-20	Language and Communication Sciences Research Fund Stipend
2019	National Academy of Sciences Travel Award
2013	College Park Scholars Co-Curricular Scholarship Award
2011	Ling Ho Anita K'ung Tong Scholarship

Teaching

2020	Curiosity: Ancient and Modern Thinking about Thinking (INTG002)
2019	Guest Lecturer, Network Neuroscience (BE566)
2019	Guest Lecturer, Computational Neuroscience Lab (BBB344)
2019	Teaching Assistant, Computational Neuroscience Lab (BBB344)

STUDENTS ADVISED

- [2] Samantha Simon (University of Pennsylvania, Physics 2023)
Diversity in science; network science; semantic networks
- [1] Mark Choi (University of Pennsylvania, Computer Science 2021)
Network structure in mathematics

MENTORSHIP

2020-	Mentor, mindCORE Step-Ahead Mentorship Program, link
2019-	Mentor, Upward Bound: Research Fridays, link

Professional Service

2020-	Web Developer, Black in STEM
2019-	Organizer, Web Designer, Penn Network Visualization program, link
2019	Committee, APICAL Service Award
2019-	Apprentice Chief, Upward Bound: Research Fridays, link
2017-	Section Chief, Brains in Brief science communication, link
2017-18	Founder, Psychology Honors Alumni (University of Maryland)
2014-15	Vice President, Philosophy Club (University of Maryland)

REVIEWER	Biological Psychiatry, Cerebral Cortex, IEEE: Transactions on Network Science and Engineering
HACKATHONS	Stiso, J.* & Zhou, D.* (2020). <i>Tools for Combating Citation Bias</i> . Organization of Human Brain Mapping Hackathon, Montreal, Canada. [link]
INVITED TALKS	Panelist, Post-Baccalaureate Research Experiences (2017), University of Maryland
Technical Skills & Training	
PROGRAMMING	R, Python, MATLAB, L ^A T _E X
IMAGE PROCESSING	Nipype, Freesurfer, ANTs, FSL, AFNI
WORKSHOPS	Organization of Human Brain Mapping Hackathon (2020), Montreal, Canada. Computational Psychiatry Summer Course (2019), New York, New York.