Satchel Grant

(503) 916 - 9281

grantsrb@stanford.edu

Website: https://grantsrb.github.io/ Github: https://github.com/grantsrb

LinkedIn: https://www.linkedin.com/in/grantsrb/

Education

Grant High School (*Portland, OR*) - High School Diploma (*May 2010*)

Whitman College (*Walla Walla, WA*) - BA Chemistry (*May 2014*)

Oregon State University (*Corvallis, OR*) - Assorted CS Classes (*Jan - Jun 2016*)

Oregon Health and Sciences University (*Portland, OR*) - Assorted Al Classes (*Sept - Dec 2018*)

Stanford University (*Stanford, CA*) - Ph.D. Cog. Psy. and CS (*Sept 2020 - Present*)

Publications

- Satchel Grant, Zhengxuan Wu, James L. McClelland, Noah D. Goodman. (*In press*). "Symbolic Variables in Distributed Networks that Count." *CogSci*. 2024.
- Niru Maheswaranathan*, Lane T. McIntosh*, Hidenori Tanaka*, **Satchel Grant***, David B. Kastner, Josh B. Melander, Aran Nayebi, Luke Brezovec, Julia Wang, Surya Ganguli, Stephen A. Baccus. "The Dynamic Neural Code of the Retina for Natural Scenes." *Neuron. 2023.*
- Xuehao Ding, Dongsoo Lee, **Satchel Grant**, Heike Stein, Lane McIntosh, Niru Maheswaranathan, Stephen Baccus. "A mechanistically interpretable model of the retinal neural code for natural scenes with multiscale adaptive dynamics," *2021 55th Asilomar Conference on Signals*, *Systems, and Computers*, 2021, pp. 287-291, doi: 10.1109/IEEECONF53345.2021.9723187.

Not Quite Publications (see my website for commentary)

- Satchel Grant, Jay McClelland. "Bidirectional Influences of Grounded Quantification and Language in Acquiring Numerical Cognitive Abilities", *Hosted on Github*. 2023. Access Link
- Satchel Grant, Sahil Kulkarni. "Leveraging Pre-Trained Large Language Models for Context Compression." *Stanford CS 324.* 2023. <u>Access Link</u>
- Satchel Grant, Matheus Dias, Sahil Kulkarni. "Spontaneous Decomposition from Grouped Network Pathways." *Stanford CS 231n.* 2022. <u>Access Link</u>
- Satchel Grant, Sahil Kulkarni, Noah Goodman. "Improving Chain of Thought with Chain of Shortcuts." Hosted on Github. 2023. Access Link
- Satchel Grant, Jay McClelland. "Recurrent Models of Number as a Cognitive Technology." *Stanford Psychology FYP.* 2022. <u>Access Link</u>
- Satchel Grant. "Language Effects on Exact Equivalence Tasks." Stanford CS 229. 2023. Access Link

Research Grants

2023 HAI Google Cloud Credits Grant (Stanford, CA)

^{*} co-first authorship

Professional and Research Experience

<u>Analytical Connectionism Summer School 2023</u> (Gatsby Computational Neuroscience Unit, University College London)

Teaching Assistant (Aug 2023)

Stanford PDP Lab (Stanford University)

Ph.D. Candidate (July 2020 - Present)

Stanford Baccus Lab (Stanford University)

Research Professional (Oct 2018 - July 2020)

Methods in Computational Neuroscience (Woods Hole, MA)

Course Coordinator/Teaching Assistant (July 2019 - August 2019)

Independent Software Developer

Software Developer (Aug 2017 - Jan 2019)

- Completed EBLI Reading Adventures #1 EBLI Island for Android.
- Completed EBLI Reading Adventures #2 EBLI Space for Android.
- Completed <u>EBLI Sight Words Made Easy</u> for Android.

Oregon State University (Corvallis, OR)

Teaching Assistant (Mar 2016 - Jun 2016)

American Red Cross (Portland, OR)

Lab Technician (Jun 2015 - Nov 2015)

Fred Hutchinson Cancer Research Center (Seattle, WA)

Research Intern (Jun 2014 - Nov 2014)

Whitman College (Walla Walla, WA)

Student Researcher (Jun 2013 - May 2014)

Chemistry Tutor (Aug 2012 - May 2014)

Food Service Manager (Sept 2010 - May 2014)

Volunteer Experience

Free Geek (Portland, OR)

Computer Assembly and Disassembly (Aug 2016 - Aug 2017)

Odd Fellows Old Folks Home (Walla Walla, WA)

Grand Parent Adoption Program (Sept 2012 - May 2014)

Dougy Center (Portland, OR)

Grief Facilitator (August 2009 - July 2010)

Extracurriculars

(Unofficial) Sprint/Exercise Club President (Dec 2023 - Present) Whitman College Varsity Soccer (Jan 2011 - Jun 2012) Whitman Badminton Club Vice President (Jan 2011 - Jun 2013)