

# Kevin W. Soo

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📄 kevinsoo.github.io/BetweenTwoWaves (blog)

## Education

University of Pittsburgh  
PhD Cognitive Psychology (expected graduation: Spring 2019)  
Dissertation topic: *The role of variable granularity and type in causal inference*  
Committee: B. Rottman, J. Woodward, M. Libertus, C. Schunn, T. Nokes-Malach  
MS Cognitive Psychology (completed Spring 2016)  
University College London  
MSc Cognitive & Decision Sciences (2011, with distinction)  
HELP University, Malaysia  
BS Psychology (2009, with first-class honors)

## Professional experience (academic)

*Graduate Student Researcher*, University of Pittsburgh (2013–present)  
Researcher on projects investigating causal cognition and decision-making in humans. Designed and developed web and lab-based behavioral experiments. Extensive statistical analysis, simulation & modeling.  
*Teaching Fellow*, University of Pittsburgh (2016–present)  
Teaching research methods lecture sections (50-60 students), supervising undergraduate students in research projects. Designed and developed interactive web-based tutorials for teaching research methods concepts.  
*Lecturer*, Department of Psychology, HELP University (2012–2013)  
Designed and taught courses in research methods, cognitive psychology, and judgment and decision-making. Supervised research and teaching assistants, honors students.

## Professional experience (other)

*Ad-hoc Data Scientist*, Pulang Mengundi (April–May 2018, 🏠 pulangmengundi.com)  
Pulang Mengundi (English translation: “return to vote”) was a platform designed by a group of civic-minded Malaysians to facilitate ride-sharing for the 14<sup>th</sup> Malaysian General Election. Developed visualizations and computational methods for identifying key routes to marginal districts.  
*Research Assistant*, Analysis of the Malaysian Electoral Roll (2012)  
Worked with Dr. Ong Kian Ming (PI, current Malaysian Member of Parliament) to develop analytical tools for detecting electoral fraud in the Malaysian Electoral Roll.

## Selected honors

University of Pittsburgh  
Honorable mention, Tim Post Award for Excellence in Research (2017)  
Arts and Sciences Fellowship (2013–2014)  
University College London  
Commonwealth Scholarship (2010–2011)  
HELP University  
Top of graduating class in the Faculty of Behavioral Sciences (2009)  
Merit Scholarship for academic performance (2006–2009)

## Publications

Soo, K. W. & Rottman, B. M. (2018). Causal induction from time series data. *Journal of Experimental Psychology: General*, 147(4), 485-513. <http://dx.doi.org/10.1037/xge0000423>

Soo, K. W. & Rottman, B. M. (2018). Switch rates do not influence weighting of rare events in decisions from experience, but optional stopping does. *Journal of Behavioral Decision Making*.  
<http://dx.doi.org/10.1002/bdm.2080>

## Peer-reviewed conference proceedings

Soo, K. W. & Rottman, B. M. (forthcoming). Causal learning from trending time series.

Soo, K. W. & Rottman, B. M. (2016). Causal learning with continuous variables over time. In A. Papafragou, D. Grodner, D. Mirman, & J.C. Trueswell (Eds.), *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (pp. 153-158).

Soo, K. W. & Rottman, B. M. (2015). Elemental causal learning from transitions. In R. Dale, C. Jennings, P. Maglio, T. Matlock, D. Noelle, A. Warlaumont, & J. Yoshimi (Eds.), *Proceedings of the 37th Annual Conference of the Cognitive Science Society* (pp. 2254-2259).

Soo, K. W. & Rottman, B. M. (2014). Learning causal direction from transitions with continuous and noisy variables. In P. Bello, M. Guarin, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 1485-1490).

## Conference presentations

Soo, K. W. & Rottman, B. M. (2015). *Causal learning from transitions and states*. Poster presented at the meeting of the Psychonomic Society, Chicago, IL.

Soo, K. W. & Lagnado, D. A. (2013). *Detecting and adapting to changes in causal systems*. Paper presented at the Asian Conference on Psychology & the Behavioral Sciences, Osaka, Japan.

Soo, K. W. (2012). *Crime Perception: Non-rational judgments*. Paper presented at the Malaysian Psychology Conference, Kuala Lumpur, Malaysia.

\*Ho, A. S. P., \*Tan, K. C. K., \*Liew, S. J. Y., \*Goh, S. M. T., \*Goh, V. W. Y. & Soo, K. W. (2012). *Differences in counterfactual regret mechanisms and counterfactual distance on decision making*. Paper presented at the South East Asia (SEA) Psychology Conference, Kota Kinabalu, Malaysia.

\*Lim, M. W. C., \*Chee, M. Y. F., \*Mok, L. L., \*Wong, T. Y. M., \*Thong, J. A. & Soo, K. W. (2012). *Investigating classification learning & inference learning in category acquisition and retention*. Paper presented at the South East Asia (SEA) Psychology Conference, Kota Kinabalu, Malaysia.

Lukman, H. & Soo, K. W. (2010). *Assessment of eating disorder symptomatology in young adult female students in urban Malaysia*. Poster presented at the World Conference on Psychology, Counseling and Guidance, Antalya, Turkey.

Lukman, H., Khor, K. L., Siew, J. L., Chua, W. L. & Soo, K. W. (2010). *Perceived body image norms in Malaysian adolescents*. Poster presented at the World Conference on Psychology, Counseling and Guidance, Antalya, Turkey.

Soo, K. W. (2009). *Source-monitoring of words and their translations in bilingual memory*. Paper presented at the South East Asia (SEA) Psychology Conference, Kota Kinabalu, Malaysia.

Soo, K. W. & Reyes, J. A. (2008). *Self-monitoring and interpersonal attraction among Malaysian college students*. Paper presented at the 2<sup>nd</sup> ASEAN Regional Union of Psychological Societies Congress, Bangkok, Thailand.

\* denotes undergraduate student advisee

<b>Selected talks</b>	<p>Cognitive Psychology Brown Bag Series, University of Pittsburgh</p> <p>September 2017: <i>Does it fit? Proportionality between causes and effects</i></p> <p>February 2017: <i>Our patterns of sampling (don't) foreshadow our decisions</i></p> <p>March 2016: <i>Causal learning with continuous variables over time</i></p> <p>March 2015: <i>Elemental causal learning from transitions</i></p> <p>April 2014: <i>Causation from correlation over time</i></p> <p>HELP University Psychology Colloquium (April 2012)</p> <p>Keynote talk: <i>How (ir)rational are we?</i></p> <p>Causality Workshop, Causal Cognition Group, University College London (August 2011)</p> <p><i>Reasoning about causal changes</i></p>
<b>Service</b>	<p>External</p> <p>Ad-hoc reviewer for Journal of Experimental Psychology: General (2017)</p> <p>Ad-hoc reviewer for PLoS ONE (2017)</p> <p>Department of Psychology, University of Pittsburgh</p> <p>Statistics Consultant for Honors Students (2018)</p> <p>Program Student Representative (2014-2015)</p>
<b>Teaching</b>	<p>Department of Psychology, University of Pittsburgh (2016–present)</p> <p>Research Methodology lab instructor</p> <p>Research Methodology lecture instructor</p> <p>Fall 2017 Student evaluation: 4.17 out of 5</p> <p>Spring 2018 Student evaluation: 4.21 out of 5</p> <p>Department of Psychology, HELP University (2012–2013)</p> <p>Lecturer/instructor in various undergraduate courses: Research Methodology, Cognitive Psychology, Thinking and Deciding, Contemporary Issues in Psychological Research (seminar), Applications of Psychology (seminar)</p>
<b>Professional membership</b>	<p>Cognitive Science Society (2014–present)</p> <p>The Psychonomic Society (2015–2016)</p>
<b>Skills</b>	<p>Programming languages, statistical and research methods</p> <p>Data visualization/analysis: R, Tidyverse, Python, Shiny web-apps, SQL, SPSS</p> <p>Advanced stats: mixed-effects modeling, topic modelling, Bayesian and causal inference</p> <p>Other expertise: experimental and survey design, crowdsourcing, web-scraping</p> <p>Web-based development</p> <p>Front-end: HTML5, CSS, Javascript, Bootstrap, d3, Leaflet</p> <p>Back-end: Python, Django, Google Cloud</p> <p>Data collection: Amazon MTurk, Qualtrics</p> <p>Publishing: GitHub, Markdown, Jupyter notebooks</p> <p>Miscellaneous</p> <p>Microsoft Office, Sublime, Atom, Adobe Lightroom</p>

## References

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