

# Vael Gates

email: vaelgates@gmail.com  
website: <http://vaelgates.com>  
outreach site: <http://womenincocosci.com>  
location: University of California, Berkeley

## Education

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**University of California, Berkeley**, PhD student in Neuroscience, 2016-present  
Advisor: Prof. Tom Griffiths (Psychology, Cognitive Science)

**University of Cambridge**, Master of Philosophy in Biological Science (Psychology), 2015-2016  
Advisor: Dr. Zoe Kourtzi (Experimental Psych.), one-year research (not taught) program  
Thesis: "Impact of Task Structure on Strategies in Statistical Learning"

**Wellesley College**, Bachelor of Arts in Neuroscience 2011-2015  
Magna cum laude (GPA: 3.82/4.00), departmental honors, Phi Beta Kappa, Sigma Xi  
Advisor: Prof. Bevil Conway (Neuroscience)  
Thesis: "Neural Correlates of the Bezold-Brücke Perceptual Color Shift"

## Publications

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*\*Previously, published under M.A. Gates*

**Gates, V.**, Griffiths, T.L., and Dragan, A.D. (*under revision*). How to be helpful: Making decisions involving multiple preferences.

**Gates, M.A.**, Veuthey, T.L., Tessler, M.H., Smith, K.A., Gerstenberg, T., Bayet, L., and Tenebaum, J.B. (2018). Tiptoeing around it: Inference from absence in potentially offensive speech. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.

Fisac, J.F., **Gates, M.A.**, Hamrick, J.B., Liu, C., Hadfield-Menell, D., Palaniappan, M., Malik, D., Sastry, S.S., Griffiths, T.L. and Dragan, A.D. (2017). Pragmatic-Pedagogic Value Alignment. *International Symposium on Robotics Research*. Awarded second place for the Blue Sky Paper awards.

**Gates, M.A.**, Suchow, J.W., and Griffiths, T.L. (2017). Empirical tests of large-scale collaborative recall. *Proceedings of the 39th Annual Conference of the Cognitive Science Society*. Selected for oral presentation.

Wang, R., **Gates, M.A.**, Perez-Pozuelo, I., Shen, Y., Tino, P., Welchman, A., and Kourtzi, Z. Learning predictive temporal structure under uncertainty. Program No. 085.18. 2018 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2018. Online.

Gagin, G., Bohon, K.S., Butensky, A., **Gates, M.A.**, Hu, J.Y., Lafer-Sousa, R., Pulumo, R.L., Qu, J.,

Stoughton, C.M., Swanbeck, S.N. and Conway, B.R. (2014). Color-detection thresholds in rhesus macaque monkeys and humans. *Journal of vision*, 14(8), 12.

## Awards

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Data on the Mind Summer Workshop, UC Berkeley, *June 2017*

Center for Brains, Minds, and Machines (CBMM) Summer Course, Marine Biological Laboratory at Woods Hole, MA, *Aug. 2017*

**NSF Graduate Research Fellowship Honorable Mention, 2017**

BAIR First-Year Travel Stipend, Berkeley Artificial Intelligence Research Lab, *2016*

Goldwater Scholarship Honorable Mention, Barry Goldwater Scholarship and Excellence in Education Foundation, *2014*

Beckman Scholar, Arnold and Mabel Beckman Foundation, *2014-2015*

Center for Brains, Minds, and Machines (CBMM) Summer Undergraduate Research Program, M.I.T., *Summer 2014*

## Teaching

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**Graduate Student Instructor for CogSci131**, UC Berkeley, *Spring 2018*

Taught two 25-student sections weekly, for Cognitive Science 131: Computational Models of Cognition. Worked with a team of six other GSIs and the instructor.

**Math Tutor for the Prison University Project**, San Quentin State Prison, *Summer 2017*

Tutored a student in elementary algebra. The Prison University Project offers a liberal arts education, included college and college-preparatory classes, to people incarcerated at San Quentin.

## Broader Impacts

### Online Resources

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#### **Science Outreach Website Developer**, *Summer 2016-Present*

Science outreach website aimed at undergraduates in science, especially female undergraduates and undergraduates in computational cognitive science: <http://womenincocosci.com>

### Public Engagement

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#### Interactive science activities

- **Volunteer Scientist in Elementary Schools, Bay Area Scientists in Schools (BASIS)**, *Spring 2017-Spring 2018*. With a group of four other female scientists, developed and volunteered monthly to teach a science lesson on the brain and senses to first-graders in Berkeley.
- Copy editor for the Berkeley Science Review, April 2017 edition, UC Berkeley, *Apr. 2017*
- Science Café (Cambridge Festival of Science) and volunteering at hands-on interactive activities (Cambridge Festival of Science), University of Cambridge, *Mar. 2016*
- Volunteer at the Cambridge Hands-On Summer Roadshow (two-day event), UK, *July 2016*

#### Career event talks

- Psi Chi Graduate Panel: 1-hour panel with USF students, University of California San Francisco, *Oct. 2017*
- Volunteer at Girls Advancing in STEM (GAINS) Conference 2017: 30-minute panel and 1-hour career mixer with high school women, Stanford University, *Apr. 2017*
- Multiple 3-minute talks describing job (scientist) with 13-14 year-olds, \*, *Mar. 2016*
- 15-minute talks leading an activity and describing job (scientist) with 14-15 year-olds, \*, *Apr. 2016*
- Career day activities with 11-12 year-olds, \*, *Apr. 2016, twice in May 2016, June 2016*
- \*Locations: Bassingbourn, Cambourne, and Chesterton Village Colleges (England)

### Mentoring

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**Computational Cognitive Science Lab**, *Fall 2018*: Grace Tai (undergraduate)

**Adaptive Brain Lab**, *2015-2016*: Harry Potts (undergraduate), Zena Ahmed (undergraduate)

**Conway Lab**, *2012-2016*: Erica Wu (high school), Anran Li (undergraduate), Patricia Grahmann (undergraduate), Jessica Keleman (undergraduate), Isabelle Rosenthal (undergraduate), Eileen Cho (undergraduate), Evelyn Lee (undergraduate), Galen Chuang (undergraduate), Hannah Schmidt (undergraduate), Youngju Choi (high school)