Alex Kale

Curriculum Vitae

Research on data visualization, uncertainty communication, visual and statistical reasoning, and HCI.

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Education

| 2017 - present | University of Washington, PhD Candidate in Information Science |
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| | Advisor: Jessica Hullman - jhullman@northwestern.edu |
| 2017 - 2020 | University of Washington |
| | M.S. in Information Science |
| 2011 - 2015 | University of Washington, Magna Cum Laude (GPA: 3.95) |
| | B.S. in Psychology with Honors; Minors in Music and Philosophy |
| | Advisor: Steve Buck - sbuck@uw.edu |
| 2007 - 2011 | Pullman High School, Valedictorian (GPA: 4.0) |

Publications

- **Kale, A.**, Wu, Y., Hullman, J. (2021). Causal Support: Modeling Causal Inferences with Visualizations. IEEE Trans. Visualization & Comp. Graphics (Proc. VIS), 28 (1). doi: xx.xxxx/TVCG.201x.xxxxxxx
- Kale, A., Kay, M., Hullman, J. (2020). Visual Reasoning Strategies for Effect Size Judgments and Decisions. IEEE Trans. Visualization & Comp. Graphics (Proc. InfoVis), 27 (1). doi: xx.xxxx/ TVCG.201x.xxxxxxx
- Schallmo M.P., Kolodny T., **Kale A.M.**, Millin R., Flevaris A.V., Edden R.A.E., Gerdts J., Bernier R.A., Murray S.O. (2020). Weaker neural suppression in autism. Nat Commun, 11(1), 2675.
- **Kale, A.** Hullman, J (2019). Adaptation and Learning Priors in Visual Inference, Position Paper. *VisxVision Workshop at IEEE VIS 2019*.
- Kale, A., Kay, M., Hullman, J. (2019). Decision-Making Under Uncertainty in Research Synthesis: Designing for the Garden of Forking Paths. ACM Conference on Human Factors in Computing Systems (Proc. CHI). doi: 10.1145/3290605.3300432
- Conlen, M., **Kale, A.**, Heer, J. (2019). Capture & Analysis of Active Reading Behaviors for Interactive Articles on the Web. *Eurographics Conference on Visualization (EuroVis), 38 (3).* http://idl.cs.washington.edu/papers/idyll-analytics
- Kale, A., Nguyen, F., Kay, M., Hullman, J. (2019). Hypothetical Outcome Plots Help Untrained Observers Judge Trends in Ambiguous Data. *IEEE Trans. Visualization & Comp. Graphics (Proc. InfoVis)*, 25 (1). doi: 10.1109/TVCG.2018.2864909
- Hullman, J., Qiao, X., Correll, M., **Kale, A.**, Kay M. (2019). In Pursuit of Error: A Survey of Uncertainty Visualization Evaluation. *IEEE Trans. Visualization & Comp. Graphics (Proc. InfoVis), 25 (1).* P 903-913. doi: 10.1109/TVCG.2018.2864889
- Schallmo M.P., **Kale A.M.**, Murray S.O. (2019). The time course of different surround suppression mechanisms. J Vis, 19(4), 12.
- Schallmo, M-P., Millin, R., **Kale, A.M.**, Kolodny, T., Edden, R.A.E., Bernier, R.A., Murray, S.O. (2019). Glutamatergic facilitation of neural responses in MT enhances motion perception in humans. *NeuroImage*, *184*. P 925-931. doi: 10.1101/283994
- Millin, R., Kolodny, T., Flevaris, A.V., **Kale, A.M.**, Schallmo, M-P, Gerdts, J., Bernier, R.A., Murray, S. (2018). Reduced auditory cortical adaptation in autism spectrum disorder. *eLife Neuroscience*. doi: 10.7554/eLife.36493
- Murray, S.O., Schallmo, M-P, Kolodny, T., Millin, R., **Kale, A.M.**, Thomas, P., Rammsayer, T.H., Troche, S.J., Bernier, R.A., Tadin, D. (2018). Sex Differences in Visual Motion Processing. *Current Biology*, *28* (17). P 2794-2799. doi: 10.1016/j.cub.2018.06.014
- Schallmo, MP., Kale, A.M., Millin, R., Flevaris, A.V., Brkanac, Z., Edden, R.AE., Bernier, R.A., & Murray,

S.O. (2018). Suppression and facilitation of human neural responses. *eLife Neuroscience*. doi: 10.7554/eLife.30334

Vincent, J., **Kale, A.**, & Buck, S. (2016). Luminance dependent long-term chromatic adaptation. *Journal of the Optical Society of America A, 33*(3), A164-A169. doi: 10.1364/JOSAA.33.00A164

Honors and Awards

| 2021 | Honorable Mention Paper Award, IEEE VIS conference |
|----------------|-----------------------------------------------------------------------|
| 2020 | InfoVis Best Paper Award, IEEE VIS conference |
| 2018 | NSF Graduate Research Fellowship Program Honorable Mention |
| 2017 | Top Scholar Award, UW Graduate School |
| 2015 | Dean's Medal Nominee, UW |
| 2015 | Gonfalonier, banner carrier at UW Commencement |
| 2014 - present | Phi Beta Kappa |
| 2014 | Guthrie Prize for Meritorious Undergraduate Writing in Psychology, UW |
| 2011-2015 | Dean's List, UW (every quarter of undergraduate) |
| Experience | |
| Summer 2021 | Research Intern, Microsoft Research |
| | Interpret ML team |
| | Supervisor: Rich Caruana - rcaruana@microsoft.com |
| 2020 - present | Visiting Scholar, Northwestern University |
| | MU Collective |
| | Supervisor: Jessica Hullman - jhullman@northwestern.edu |
| 2017 - present | Research Assistant, University of Washington |
| | MU Collective & Interactive Data Lab |
| | Supervisor: Jessica Hullman - jhullman@northwestern.edu |
| 2015 - 2017 | Research Assistant, University of Washington |
| | Vision-Cognition Lab |
| | Supervisor: Scott Murray - somurray@uw.edu |
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References, teaching experience, speaking engagements, and skill list available upon request.