



## Andrew James Phillips

Ph.D. Student in Electrical Engineering, admitted Autumn 2020

### Publications

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#### PUBLICATIONS

- **Leveraging current steering and the biophysics of spike generation for cellular-resolution electrical stimulation of neurons.** *Cell reports*  
Vasireddy, P. K., Vilku, R. S., Lotlikar, A., Brown, J. B., Phillips, A. J., Gogliettino, A. R., Hays, M. R., Baum, C., Kato, E. J., Sharon, A., Hottowy, P., Sher, A., Litke, et al  
2026; 45 (2): 116917
- **Direct-Print 3D Electrodes for Large-Scale, High-Density, and Customizable Neural Interfaces.** *Advanced science (Weinheim, Baden-Wurtemberg, Germany)*  
Wang, P., Wu, E. G., Uluşan, H., Zhao, E. T., Phillips, A. J., Kling, A., Hays, M. R., Vasireddy, P. K., Madugula, S., Vilku, R., Hierlemann, A., Hong, G., Chichilnisky, et al  
2024: e2408602
- **Precise control of neural activity using dynamically optimized electrical stimulation.** *eLife*  
Shah, N. P., Phillips, A. J., Madugula, S., Lotlikar, A., Gogliettino, A. R., Hays, M. R., Grosberg, L., Brown, J., Dusi, A., Tandon, P., Hottowy, P., Dabrowski, W., Sher, et al  
2024; 13
- **A 1024-Channel 268 nW/pixel 36×36 μm<sup>2</sup>/channel Data-Compressive Neural Recording IC for High-Bandwidth Brain-Computer Interfaces.** *IEEE journal of solid-state circuits*  
Jang, M., Hays, M., Yu, W. H., Lee, C., Caragiulo, P., Ramkaj, A., Wang, P., Phillips, A. J., Vitale, N., Tandon, P., Yan, P., Mak, P. I., Chae, et al  
2024; 59 (4): 1123-1136
- **Efficient Modeling and Calibration of Multi-Electrode Stimuli for Epiretinal Implants**  
Vasireddy, P. K., Gogliettino, A. R., Brown, J. B., Vilku, R. S., Madugula, S. S., Phillips, A. J., Mitra, S., Hottowy, P., Sher, A., Litke, A., Shah, N. P., Chichilnisky, E. J., IEEE  
IEEE.2023