Stanford

Michael Wornow

Ph.D. Student in Computer Science, admitted Autumn 2020

Bio

BIO

Michael is a computer science PhD student focused on developing and operationalizing large-scale pretrained models ("foundation models") in healthcare. He is advised by Nigam Shah and Chris Re and is supported by an NSF Graduate Research Fellowship.

HONORS AND AWARDS

- HAI Graduate Fellowship, Stanford HAI (2023)
- NSF Graduate Research Fellowship, NSF (2020-2023)

Publications

PUBLICATIONS

- **The shaky foundations of large language models and foundation models for electronic health records.** *NPJ digital medicine*
  Wornow, M., Xu, Y., Thapa, R., Patel, B., Steinberg, E., Fleming, S., Pfeffer, M. A., Fries, J., Shah, N. H.
  2023; 6 (1): 135

- **APLUS: A Python Library for Usefulness Simulations of Machine Learning Models in Healthcare.** *Journal of biomedical informatics*
  Wornow, M., Gyang Ross, E., Callahan, A., Shah, N. H.
  2023: 104319

- **Generating experimentally unrelated target molecule-binding highly functionalized nucleic-acid polymers using machine learning** *NATURE COMMUNICATIONS*
  Chen, J. C., Chen, J. P., Shen, M. W., Wornow, M., Bae, M., Yeh, W., Hsu, A., Liu, D. R.
  2022; 13 (1): 4541

- **Construction of disease-specific cytokine profiles by associating disease genes with immune responses.** *PLoS computational biology*
  Liu, T., Wang, S., Wornow, M., Altman, R. B.
  2022; 18 (4): e1009497

- **Interregional Transfers for Pandemic Surges.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*
  Michelson, K. A., Rees, C. A., Sarathy, J., VonAchen, P., Wornow, M., Monuteaux, M. C., Neuman, M. I.
  2021; 73 (11): e4103-e4110

- **Cut out the annotator, keep the cutout: better segmentation with weak supervision**
  Hooper, S., Wornow, M., Seah, Y., Kellman, P., Xue, H., Sala, F., Langlotz, C., Re, C.
  2021

- **In vivo base editing restores sensory transduction and transiently improves auditory function in a mouse model of recessive deafness** *SCIENCE TRANSLATIONAL MEDICINE*
  Yeh, W., Shubina-Oleinik, O., Levy, J. M., Pan, B., Newby, G. A., Wornow, M., Burt, R., Chen, J. C., Holt, J. R., Liu, D. R.
  2020; 12 (546)