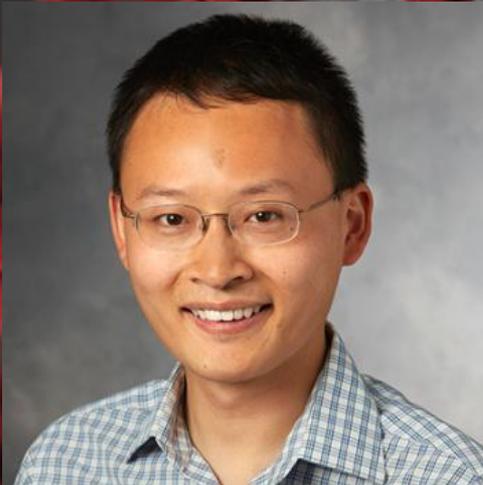


Data Science and Machine Learning Seminar Series

Tuesday 20th October 2020 6:00pm KT216

Virtual Presentation: <https://purdue.webex.com/meet/aselvite>



Prof. James Zou

**Department of Biomedical Data Science
Departments of Computer Science and Electrical Engineering
Stanford University**

Where does the virus go inside human cells?

ML model of SARS-CoV-2 localization

It's mysterious what the SARS-CoV-2 virus does once it's inside the host cell. I will discuss our new ML algorithm, RNA-GPS, that models and predicts where RNA sequences physically localize in human cells.

RNA-GPS suggests the RNA genome of SARS-CoV-2 hijacks cellular machinery to transport to the mitochondria and nucleolus. Such localization can have important implications for viral biology as well as for treatments. This work is described in [https://www.cell.com/cell-systems/fulltext/S2405-4712\(20\)30237-4](https://www.cell.com/cell-systems/fulltext/S2405-4712(20)30237-4). I

will also summarize the highlights from our Stanford Data Science and AI for COVID-19 class:

<https://sites.google.com/view/data-science-covid-19>.

Data Science and COVID-19 *Thematic Program 2020-2021*