Stanford



Bijie Ren

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Bio

BIO

Bijie Ren is a quantitative biologist as well as a pro bono academic advisor for the SATORI Institute for Complexity and Emergence (SICE). Inspired by electrical engineering and synthetic biology courses at MIT, he developed a profound interest in integrating digital logic into synthetic biotechnology. He earned his Ph.D. in Quantitative Biology from UC San Diego and was a Postdoctoral Fellow at the Carnegie Institution for Science at Stanford University. His expertise lies at the intersection of AI and synthetic biology, built a high throughput cellOS to quickly Decode-Design-Recode novel species, with a specific focus on engineering microalgae to foster a better ocean ecosystem, discovery of anti-aging chemicals/peptides with new technology and real-world ground-truth data generation for virtual cell training and AlphaFold improvement. The whole pipeline can quickly help scientists to discover novel protein targets involved in aging process, design new chemical/peptide to target on these proteins and validate their effect in the wet lab to see if these molecules can extend single cell life span. The ingredients can be used for cosmetic, cosemtic injection, healthcare food and pharmacy sequentially. And with powerful cell factory and new synbio technology, he can reduce the R&D and manufacture cost by log scale.

In his advisory role at SICE, he also collaborated with distinguished faculties from top universities to initiate local "Labrary", aiming to empower young students to succeed in both academia and industry.