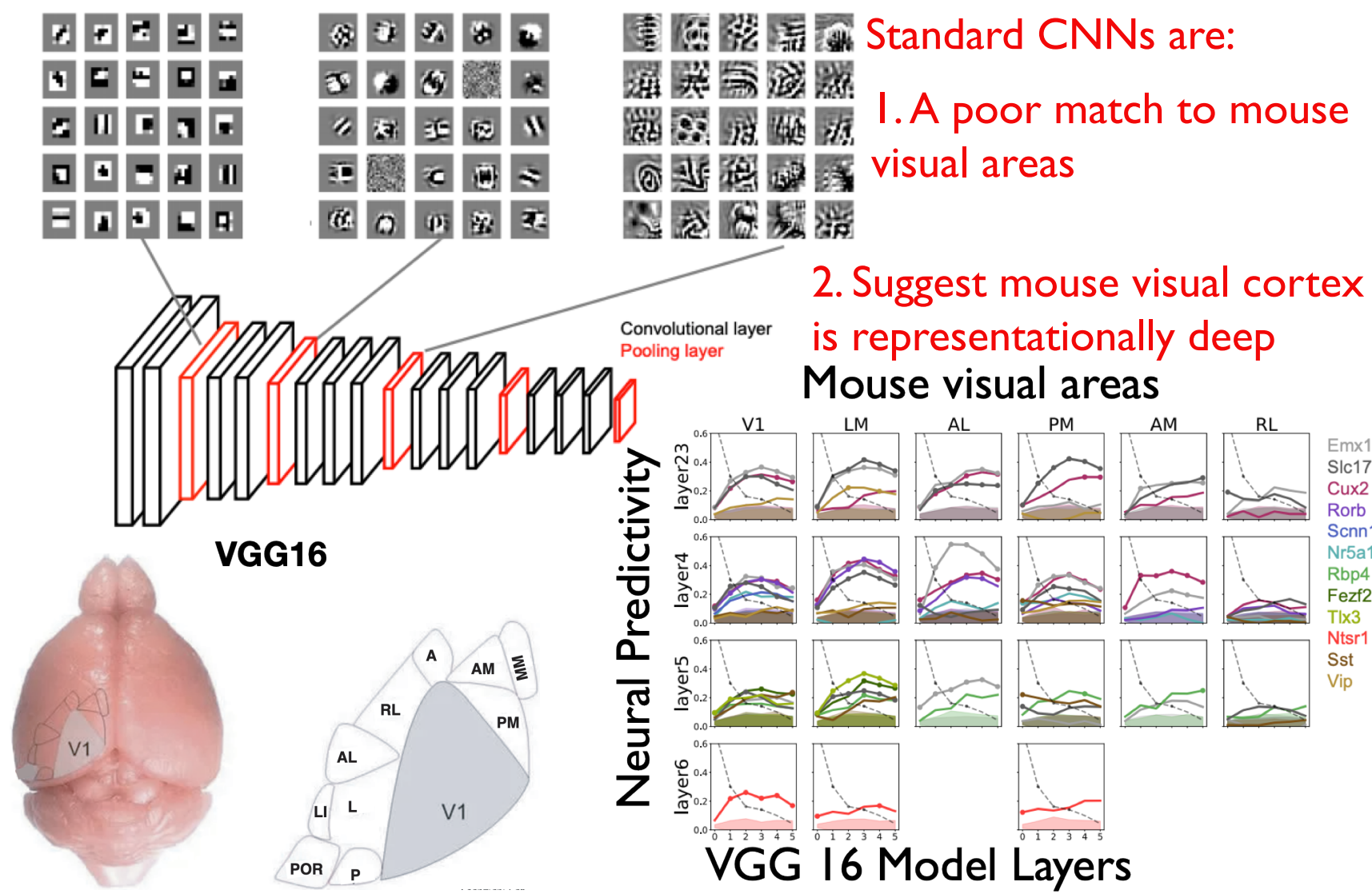


Mouse visual cortex as a limited resource system that self-learns an ecologically-general representation

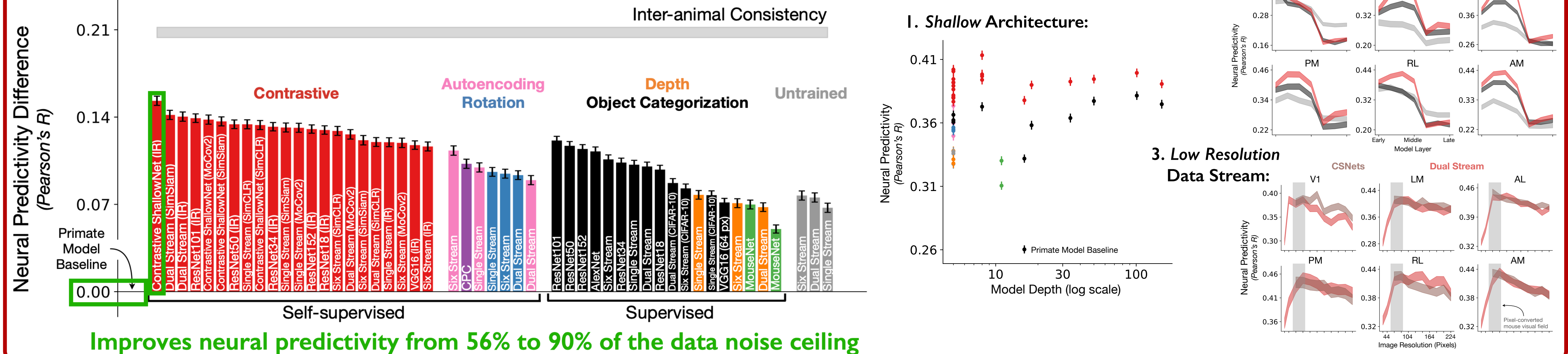
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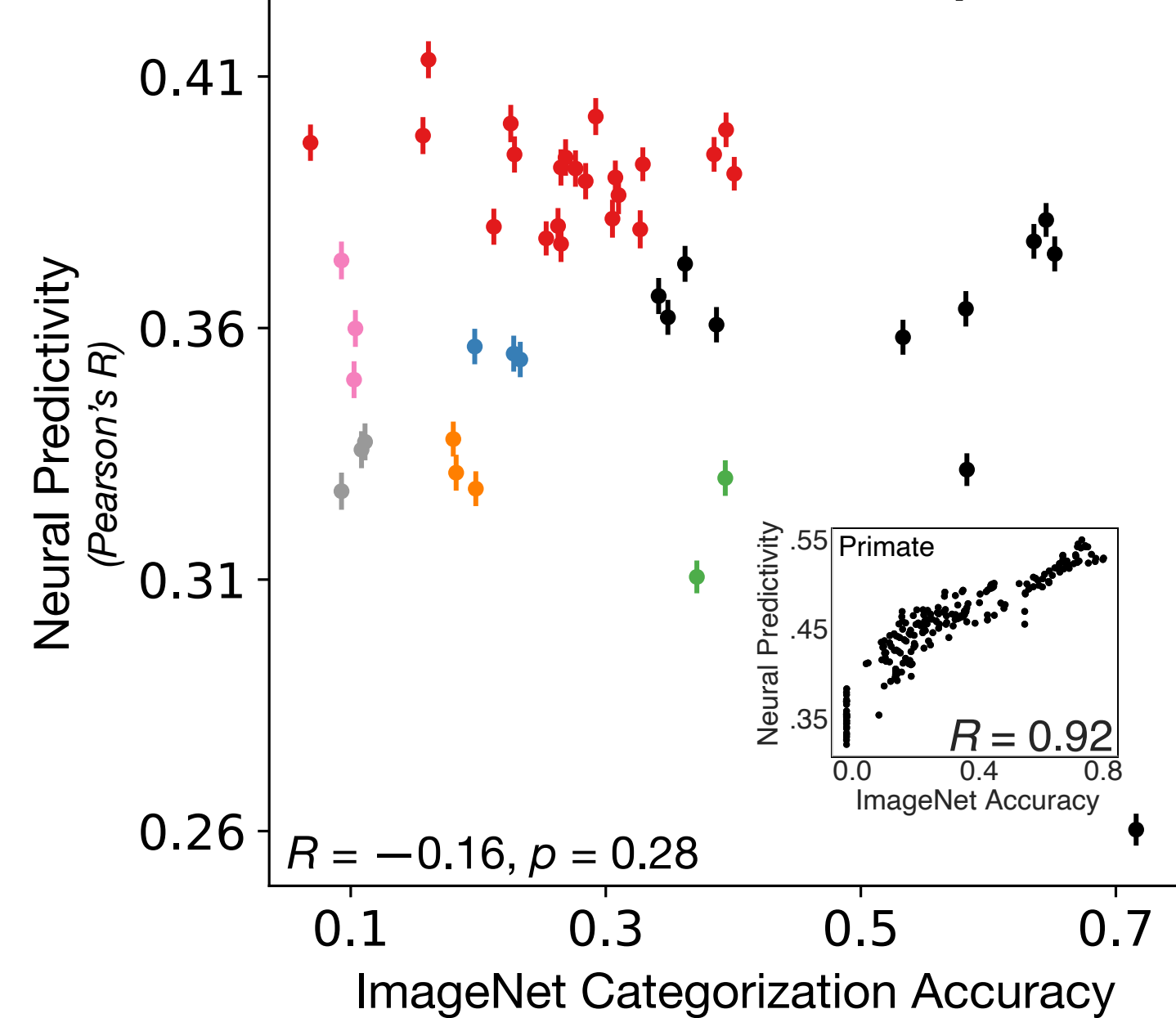
Motivation



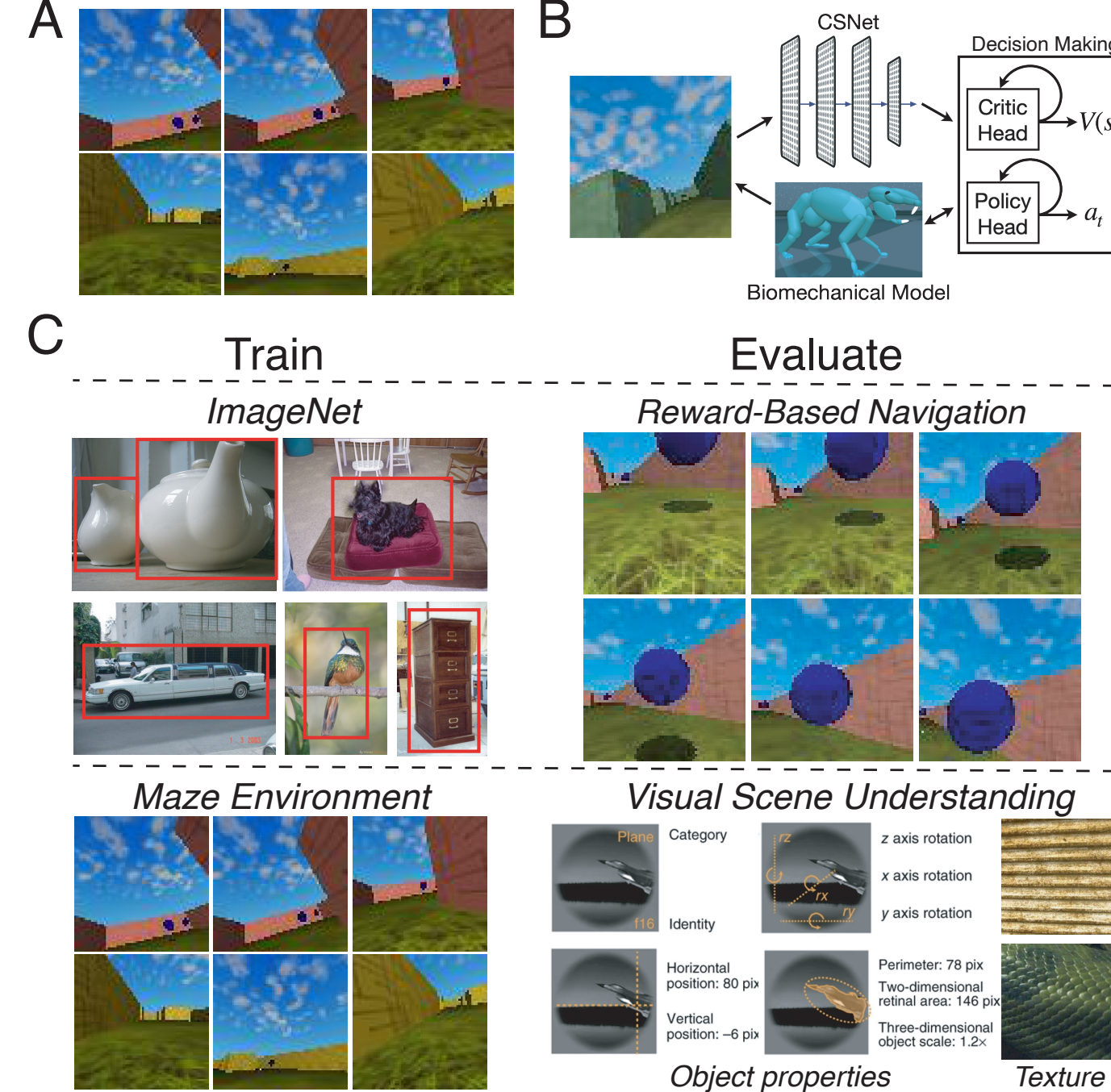
Substantially improving neural response predictivity



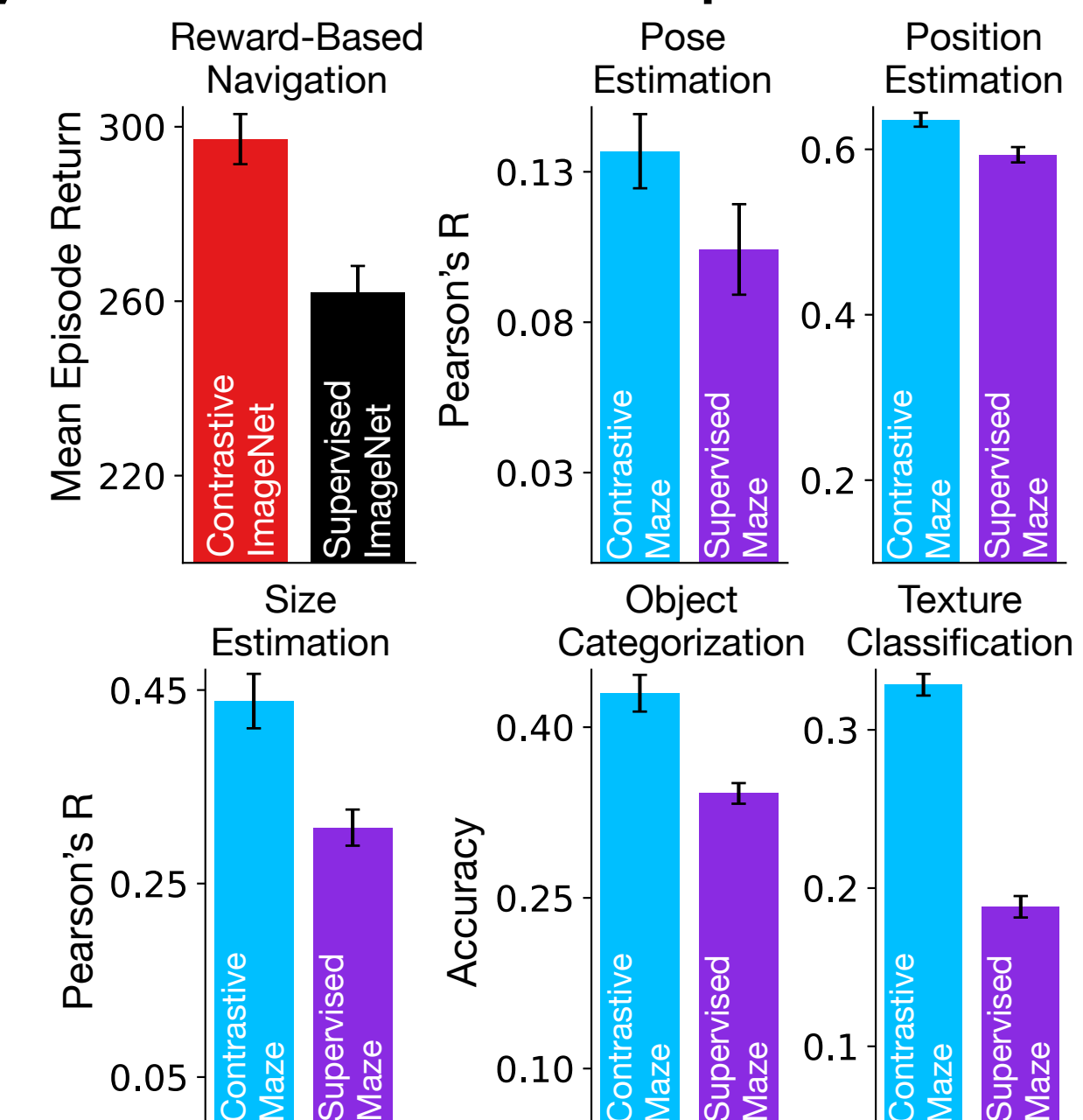
ImageNet categorization performance **not** correlated with neural predictivity



Assessing Task-Generality



Contrastive models yield better transfer performance



Conclusions

What are the core differences between mouse visual cortex and the primate ventral stream?

The naive application of standard supervised deep neural network models leads to poor quantitative match between the model and the mouse visual responses.

Mouse visual cortex is a general-purpose system utilizing its limited resources to perform a variety of tasks in novel environments.

In contrast to the deep, high resolution, and task-specific primate visual system.

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