CBSR

Michael Beyeler

Assistant Professor, Psychological & Brain Sciences, Computer Science, UC Santa Barbara

Learning to See Again with a Bionic Eye

About the Speaker

Michael Beyeler directs the Bionic Vision Lab at UC Santa Barbara. He received a PhD in Computer Science from UC Irvine as well as a BS in Electrical Engineering and a MS in Biomedical Engineering from ETH Zurich, Switzerland. Prior to joining UCSB, he completed a postdoctoral fellowship in the labs of Ione Fine (Psychology, Institute for Neuroengineering) and Ariel Rokem (eScience Institute) at the University of Washington, where he started working on computational models of bionic vision. He is Associate Director of the UCSB Center for Virtual Environments and Behavior (ReCVEB) and recipient of the National Institutes of Health (NIH) K99/R00 Pathway to Independence Award as well as the prestigious NIH Director's New Innovator Award.

-Dr. Michael Beyeler

This event will be recorded.

When

**May 15, 2023
5:00 p.m.**

Where

Zoom

About the Presentation

How can we return a functional form of sight to people who are living with incurable blindness? Despite recent advances in the development of visual neuroprostheses ("bionic eye"), the quality of current prosthetic vision is still rudimentary and does not differ much across different technologies.

In this talk, I will describe our recent efforts to develop computational models that can predict what implant recipients "see" when they use their device. I will discuss the challenges that people face when they have to learn to see again and outline next steps towards a next-generation bionic eye.

Student Engagement and Enrichment in Data Science (SEEDS)