Postdoctoral fellowship in Neuro-Robotics

with Francisco Valero-Cuevas

August 2021

http://ValeroLab.org/crcns

USC Viterbi
School of Engineering

Your Qualifications: Deep knowledge and passion for neuroanatomy, sensorimotor control and/or computational neuroscience. Excellent collaborative, interdisciplinary and leadership skills. Results-oriented. Excellent training and skills in two or more of the following: engineering, systems neuroscience, neuroanatomy, computer science, neuromechanics, and robotics.

Goal: Machines rely primarily on prescribed algorithms for centralized closed-loop control. Animals, by contrast, rely on neural circuits distributed throughout the brain, brainstem and spinal cord. You will have a leadership position in our team to create versatile neuro-robots (robots with a nervous system) controlled by neuromorphic circuits that mimic the neuroanatomy and neural dynamics recorded in the MI/SI cortices, brainstem, and cervical spine of behaving animals.

Location: Viterbi School of Engineering, University of Southern California, Los Angeles, CA, USA.

Duration: 2 years.

Application deadline: September 30, 2021.

Start date: Late 2021, or early 2022 if the candidate is outstanding.

PI: Francisco Valero-Cuevas at USC. Extensive interaction with Kazuhiko Seki (Tokyo, Japan) and other local and international collaborators.

Diversity and Inclusion: Prof. Valero-Cuevas (he/him) is committed to diversity, equity, inclusion and anti-racism in teaching and research policies, mentorship, and practices. Women and underrepresented individuals in STEM are especially encouraged to apply.

To Apply: Email CV and letter of intent to valero@usc.edu, including names of three referees.