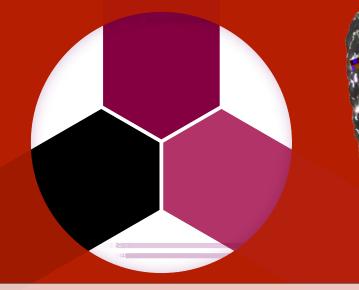
CONTE BO INSTITUTE



SENSING + PERCEPTION

- Deep learning and statistical analysis of images and video for object detection, scene understanding and context sensing
- Computational models for recognizing actions and inferring intent and relationships
- Processing of inputs from real-life applications
- Sensing, control and optimization algorithms

COGNITION + COORDINATION

- Distributed decision making and evolution of group behavior despite uncertainty and limited communication
- Embodied Arti cial Intelligence
- Synthetic brain architectures
- Methods of coupling high-performance computing and the Internet of Things with local planning and decision making
- Conveying ethical and moral imperatives to robot behavior

MOBILITY + MANIPULATION

- Biologically inspired actuators (limbs) and new materials
- Robust feedback control mechanisms for distributed, noisy, unknown environments
- Models using context to direct

Environmental Sensing Swarms

Picehdedfe ba c ìcaì gìaì e e ì e ce h e ech g ha ca be e a edì a de e ì g h ìca e; e f-dì ìb e; a d ac he e e e a da hie e dig da a bac f eca ì g ce e . The ba eebìgbacc, eeagigid′gaicaí. Sì ì gì hhì eh d ca adìca ì e he acc ac f acadìeìfeca, ìdìg eìe ee f ha 'a. Mecha ìca e gì ee ìg fe Th a Be e a dhì ea ae ìg ehì dì^rc c be,ì ìg de adìg f ceeìeaìeaìe. Thìì eea efhe dcac e e i e a UC Sa Dieg ha ì beì gad a ced a da ìed ì e 'bìce.



ROBOTICS HUB

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Learn more about advanced robotics systems at UC San Diego ContextualRobotics.ucsd.edu

UC SAN DIEGO FACULTY AND RESEARCHERS

Bioengineering

Ge Ca e begh T dd C e a Gabie Si a

Computer Science & Engineering

KaaìaChadhi Ma haChadae GaìCe RaehGa RaKae RaìRaahì TaaaRìg MichaeTa

NanoEngineering

Sha che Che J e h Wa g She g X

Electrical & Computer Engineering

ShaaFaia JehFd TaaJaidi GeLacie PaicMecie GabieRebei MhaTiedi NVacce

Mechanical & Aerospace Engineering

Tha Bee BbBiead JgeCe JaeFied Mi a Kic Sia Maie Sa Saa Fa Tae Michae Te

Structural Engineering

Fa Kee

Cognitive Science

Adea Chiba Vigiia de Sa Daid Kih DgaNi Ae Sagi Zhe T

Institute for Neural Computation

Maia Bae Sc Maeig Jaie Mea

Communication

MaaAa<u>o</u>

Qualcomm Institute

C Sch ge