We invent the wearable systems the world needs.

Wearable sensors are trending, but only UC San Diego is championing the unobtrusive, ultra-low power, highly adaptive sensor systems that will revolutionize health care by way of the data available from our bodies.

The Center for Wearable Sensors has world-renowned faculty and top students working in the key areas that converge to invent and test the sensing platforms and technologies that fuel the future of sensor systems.

Join us.

Systems Research and Technologies

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Membership Opportunities

Access **experimental wearable sensor platforms** and a community of engineers and medical researchers developing these systems for real-world applications.

Keep abreast of breakthroughs relevant for growth in **your industry**.

Recruit a **qualified technical workforce** innovating the wearable sensing industry.
WHO WE ARE and WHAT WE DO

We design new sensors, sensor electronics, materials, and energy harvesters. We integrate our work into real demonstration systems whose designs are informed by leading clinicians and human interface design experts.

SENSORS AND SYSTEMS
Gert Cauwenberghs
Wireless dry and non-contact biopotential monitoring
Todd Coleman
Information theory, neuroscience, machine learning, bioelectronics
Harinath Garudadri
Signal processing, wearable electrophysiology
David Gough
Long-term glucose sensors, biocompatible materials
Drew Hall
Biosensors, medical electronics, sensor interfaces
Patrick Mercier
Wireless communications, energy-harvesting integrated circuits, ultra-low-power systems
Albert P. Pisano
MEMS, manufacturing, low-cost sensors
Tajana Rosing
Energy-efficient systems, embedded systems
Joseph Wang
Non/minimally-invasive electrochemical sensing, printable sensors, bioelectronics

ULTRA-LOW POWER, MICRO- AND NANO-NETWORKS
Gabriel Rebeiz
RFICs for microwave and mm-wave systems, low-power circuits

NOVEL MATERIALS AND FLEXIBLE ELECTRONICS
Darren Lipomi
Stretchable electronics, polymer chemistry, stimuli-responsive materials
Tse Nga (Tina) Ng
Free-form, flexible electronics fabrication
Sheng Xu
Wearable electronics, advanced stretchable materials

NOVEL FABRICATION AND INTEGRATION METHODS
Shadi Dayeh
Electro-neural interfaces and compact wearable electronics
Mike Heller
Sample-to-answer and POC diagnostics for cancer, brain injury, stroke, diabetes

Yu-Hwa Lo
Microfluidics, biomedical devices for in-vitro diagnostics, bio- and nanophotonics

CLOUD DATA STORAGE AND ANALYTICS
Chung-Kuan Cheng
Parallel processing, power network analysis for VLSI systems and circuits
Tzvy-Ping Jung
Dry & non-prep EEG sensors, wearable and wireless EEG systems
Gert Lanckriet
Machine learning, personalized mobile health

MEDICINE AND CLINICAL WORK
Kevin Patrick, MD
Mobile and social technologies for health care

DESIGN
Benjamin Bratton
UC San Diego visual arts professor

HEALTH CARE
SECURITY/FORENSICS
FITNESS
TEXTILES

Partner Benefits
» Recruit our top students
» Collaborate one-on-one with faculty
» Embed a visiting Industry Fellow in our labs
» Industry-faculty-student research teams
» Biannual Research Reviews

» Fast-track research agreements
» Access to commercialization engine with lab-to-market focus
» Corporate Affiliates Program membership

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