

UNIVERSITÀ
DEGLI STUDI
DI TRIESTE

Ph.D. programme, a brief description

Research project and interests

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MY RESEARCH PROJECT

Bilistick device hardware and software IoT-oriented redefinition, together with a bilirubin calculus and hematocrit estimation algorithms enhancement from a blood microcapsule.

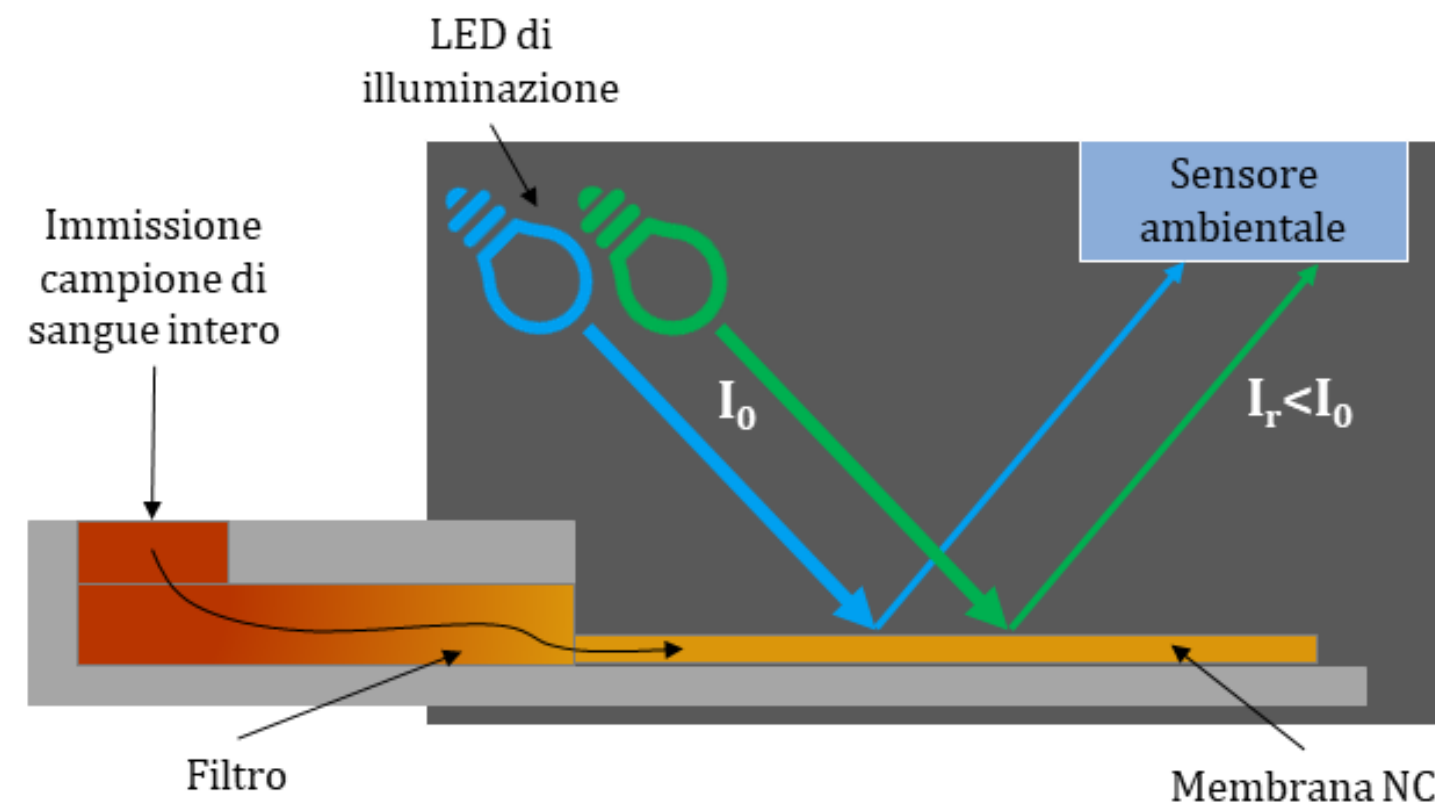
Some research interests:

- Biomedical electronics
- Signal acquisition
- Embedded devices control software development and user interface development
- Bilirubin measurement methods

BILIRUBIN, TECHNOLOGIES, SCENARIOS



FROM REQUIREMENTS TO SOLUTION



- ✓ Measurement on 35 μL of blood
- ✓ No sample treatment, no reagents
- ✓ Results in less than 3 minutes
- ✓ Good accuracy
- ✓ Battery-powered hand-held device
- ✓ Easy to use and interpret, automatic measurement
- ✓ Relatively low cost



RESEARCH THEMES

Hemoglobin influence
correction

Temperature and
relative humidity
influence on the system

Acquisition chain
optimization

Integrating hematocrit
estimation