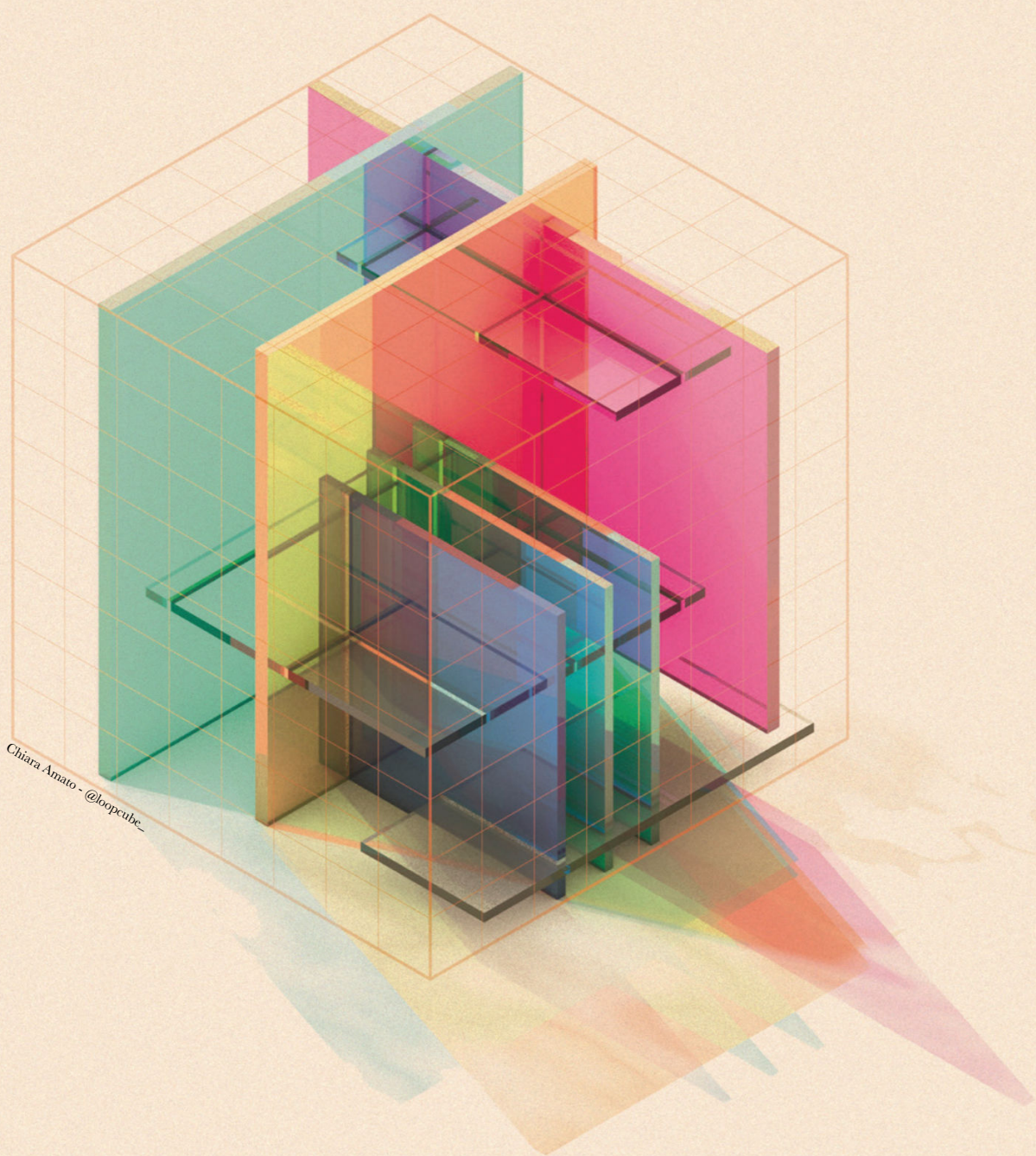


# Programma Workshop Online 2020



Chiara Amato - @loopcube



9:30 - 10:00

## Apertura dei Lavori

### Session 1 - Tailoring products and services for the Aging society

Chair: *Gabriella Cortellessa*

• **Ore 10:00 – Personalized Integrated care for frail seniors within the Pharaon Project: the Italian pilot site**

*Laura Fiorini<sup>1</sup>, Erika Rovini<sup>1</sup>, Grazia D'Onofrio<sup>2,1</sup>, Sergio Russo<sup>2</sup>, Filomena Ciccone<sup>2</sup>, Francesco Giulian<sup>2</sup>, Daniele Sancarlo<sup>2</sup>, Lara Toccafond<sup>3</sup>, Gianna Vignani<sup>3</sup>, Marco Di Girolamo<sup>4</sup>, Manuele Bonaccors<sup>5</sup>, Cristiano Paggett<sup>6</sup>, Elena Tamburin<sup>6</sup>, Pietro Dionisio<sup>7</sup>, Simona Gelli<sup>7</sup>, Filippo Cavallo<sup>8,1</sup>*

- |   |                           |
|---|---------------------------|
| 1. Scuola Superiore Sant'Anna                             | 5. Co-Robotics S.r.l.     |
| 2. Fondazione IRCCS, Casa Sollievo della Sofferenza       | 6. Orthokey Italia S.r.l. |
| 3. Umana Persone Development & Research Social Enterprise | 7. Medea S.r.l.           |
| 4. Hewlett Packard Enterprise S.r.l.                      | 8. Università di Firenze  |

• **Ore 10:15 – Assistive Technology for Active Ageing: the NATIFLife Project**

*Bruno Andò<sup>1</sup>, Salvatore Baglio<sup>1</sup>, Salvatore Castorina<sup>1</sup>, Ruben Crispino<sup>1</sup>, Vincenzo Marletta<sup>1</sup>, Giovanni Muscato<sup>1</sup>, Luca Porcaro<sup>2</sup>, Sebastiano Salupo<sup>3</sup>, Carl J. Debono<sup>4</sup>, Nadia Theuma<sup>5</sup>*

1. Università di Catania
2. Viteco S.r.l.
3. Salupo S.a.s.
4. Università di Malta
5. Paragon Europe

• **Ore 10:30 – Tailoring a Forward Looking Vocal Assistant to Older Adults**

*Riccardo De Benedictis<sup>1</sup>, Amedeo Cesta<sup>1</sup>, Gabriella Cortellessa<sup>1</sup>, Claudia Tagliaferri<sup>1</sup>*

1. Consiglio Nazionale della Ricerca

• **Ore 10:45 – Design and development of a telepresence and monitoring service to empower the older adults**

*Alessandra Sorrentino<sup>1</sup>, Lorenzo Radi<sup>1</sup>, Filippo Cavallo<sup>1,2</sup>, Claudia Becchimanzi<sup>2</sup>, Mattia Pistolesi<sup>2</sup>, Francesca Tos<sup>2</sup>, Erika Rovini<sup>2</sup>, Laura Fiorini<sup>1</sup>*

1. Scuola Superiore Sant'Anna
2. Università di Firenze

10:00 - 11:00

### Session 2 - Designing for Inclusion and Well Being

Chair: *Niccolò Casiddu*

• **Ore 11:00 – F360: Fitness 360° outdoor**

*Tanya Valori<sup>1</sup>, Davide Paciotti<sup>1</sup>, Giuseppe Losco<sup>1</sup>*

1. Università di Camerino

• **Ore 11:15 – SHIP Project: designing inclusive, accessible, and sustainable urban parks**

*Alice Bettelli<sup>1</sup>, Patrik Pluchino<sup>1</sup>, Valeria Orso<sup>1</sup>, Giulia Dainese<sup>2</sup>, Valentina Campagnaro<sup>2</sup>, Edoardo Narne<sup>1</sup>, Antonio Paoli<sup>1</sup>, Luciano Gamberini<sup>1</sup>*

1. Università di Padova
2. Gruppo L'Incontro Social Enterprise

• **Ore 11:30 – Adopting assistive technologies in healthcare processes: a chatbot for patients with amyotrophic lateral sclerosis**

*laria Angela Amantea<sup>1</sup>, Emilio Sulis<sup>1</sup>, Guido Boella<sup>1</sup>, Fabiola De Marchi<sup>2</sup>, Letizia Mazzini<sup>2</sup>, Francesca Alloatt<sup>3</sup> and Andrea Boliol<sup>3</sup>.*

1. Università di Torino
2. Azienda Ospedaliero-Universitaria Maggiore della Carità
3. CELI - Language Technology

• **Ore 11:45 – Design and applications of a trustworthy AI system favoring the Well Being of a community of people**

*Laura Burzagli<sup>1</sup>, Valentina Colcelli<sup>1</sup>*

1. Consiglio Nazionale della Ricerca

11:00 - 12:00

### Panel Session - Presentazione attività Cluster Tecnologico Nazionale "Smart Living Technologies"

Coordina:

*Luciano Gamberini, HIT, Università di Padova*

Discussant:

*Pietro Siciliano, Presidente AitAAL*

*Amedeo Cesta, Membro del Consiglio Direttivo AitAAL*

12:00 - 12:30

12:30 - 13:30

### Poster Session

13:30 - 14:30

### Lunch Break

### Session 3 - Bio-Data and Artificial Sensing in AAL Scenarios

Chair: *Andrea Monteriù*

• **Ore 14:30 – Heart Rate Estimation using the EVM Method Under Different Light Conditions**

*Manola Ricciuti<sup>1</sup>, Linda Senigaglia<sup>1</sup>, Ennio Gambi<sup>1</sup>*

1. *Università Politecnica delle Marche*

• **Ore 14:45 – Vision-based Heart Rate Monitoring in the Smart Living Domains**

*Andrea Caroppo<sup>1</sup>, Alessandro Leone<sup>1</sup>, Andrea Manni<sup>1</sup>, Pietro Siciliano<sup>1</sup>*

1. *Consiglio Nazionale della Ricerca*

• **Ore 15:00 – Combined vision and wearable system for daily activity recognition**

*Federica G. C. Loizzo<sup>1</sup>, Laura Fiorini<sup>1,2</sup>, Alessandra Sorrentino<sup>1,2</sup>, Alessandro Di Nuovo<sup>1,2</sup>, Filippo Cavallo<sup>1,2</sup>*

1. *Università di Firenze*

2. *Scuola Superiore Sant'Anna, Pisa*

• **Ore 15:15 – Novel cloud-based ICT solution for real-time Heart Rate Variability analysis: a technical essay**

*Massimo Pistoia<sup>1</sup>, Paolo Casacci<sup>1</sup>, Gianfranco Raimond<sup>2</sup>*

1. *Liferesult Srl*

2. *Università di Roma*

14:30 - 15:30

### Panel Session - Tecnologie per gli Ambienti di vita, Servizi per le Fragilità e l'Assistenza Domiciliare nelle risposte Anti Covid-19

Coordina:

*Giovanni De Luca, RAI, Venezia*

Discussant:

*Giovanni Pietro Girotto, Senato della Repubblica*

*Mauro Trapani, Dirigente Ricerca e Sviluppo Regione Veneto*

*Sergio Cametti, Televita, Roma*

*Matteo Cestari, Omitech, Padova*

*Sebastian Vadalà, Genius Robotics, Torino*

*Luciano Gamberini, HIT, Università di Padova*

15:30 - 17:00

### Session 4 - Cognition and Technologies

Chair: *Lorena Rossi*

• **Ore 17:00 – A sensing platform to monitor sleep efficiency**

*Antonino Crivello<sup>1</sup>, Davide La Rosa<sup>1</sup>, Elisabeth Wilhelm<sup>2</sup>, Filippo Palumbo<sup>3</sup>*

1 *Consiglio Nazionale della Ricerca*

2 *Sensory Motor Systems Lab*

3 *Università di Groninga*

• **Ore 17:15 – Comparison of a computerized test battery versus paper test in cognitive assessment of dementia-affected patients**

*Simona Gabriella Di Santo<sup>1</sup>, Flaminia Franchini<sup>1</sup>, Giuseppe Sancesario<sup>2</sup>, Massimo Pistoia<sup>3</sup>, Paolo Casacci<sup>3</sup>*

1 *Santa Lucia IRCCS Foundation, Rome*

2 *Università di Tor Vergata*

3 *Bioresult Srl*

• **Ore 17:30 – Clinical Decision Support System for Multisensory Stimulation Therapy in Dementia: A Preliminary Study**

*Giovanni Diraco<sup>1</sup>, Alessandro Leone<sup>1</sup>, Pietro Siciliano<sup>1</sup>*

1 *Consiglio Nazionale della Ricerca*

• **Ore 17:45 – Are wearable sensors useful to assess the psychophysical fatigue due to physical activity in elderly people with Mild Cognitive Impairment? A preliminary study**

*Alessandro Tonacci<sup>1</sup>, Jorilda Biba<sup>2</sup>, Francesco Sansone<sup>1</sup>, Lucia Billeci<sup>1</sup>, Gennaro D'Angelo<sup>1</sup>, Immacolata Minichiello<sup>1</sup>, Raffaele Conte<sup>1</sup>, Lorenza Pratali<sup>1</sup>*

1 *Consiglio Nazionale della Ricerca*

2 *Università di Pisa*

17:00 - 18:00

18:00 - 18:30

**Chiusura dei Lavori**

## Poster Session (in details)

### An Edge Ambient Assisted Living Process for Clinical Pathway

C. Ardito<sup>1</sup>, T. Di Noia<sup>1</sup>, C. Fasciano<sup>1,2</sup>, D. Lofù<sup>1,2</sup>, G. Mallardi<sup>1,2</sup>, N. Macchiarulo<sup>1,3</sup>, A. Paziienza<sup>2</sup>, F. Vitulano<sup>2</sup>

1. Politecnico di Bari
2. Exprivia S.p.A.
3. Università degli Studi di Bari

### An innovative telemonitoring system for older adults based on low power wide area networks

Lisa Cesario<sup>1</sup>, Arianna Gherardini<sup>1</sup>, Massimiliano Malavasi<sup>1</sup>, Carlo Montanari<sup>1</sup>, Antonio Iossa<sup>2</sup>, Stefania Nanni<sup>2</sup>, Lorenzo Desideri<sup>1</sup>

1. WeCareMore Cll Centro per la Ricerca e l'Innovazione
2. Lepida Scpa

### ASTAHG project: a transitional approach to improve Active and Healthy Ageing governance

Michela Cinello<sup>1</sup>, Sara Zanchiello<sup>1</sup>, Chiara De Vita<sup>1</sup>, Elisa Mars<sup>2</sup>, Gianna Zamaro<sup>2</sup>, Gian Matteo Apuzzo<sup>2</sup>

1. Area Science Park
2. Regione Autonoma Friuli-Venezia Giulia

### Can cobot support the aging workers? The CO-ADAPT project

Chiara Rossato<sup>1</sup>, Patrik Pluchino<sup>1</sup>, Michele Mingardi<sup>1</sup>, Luciano Gamberini<sup>1</sup>

1. Università degli studi di Padova

### CASSIA Project - Cloud Assisted for Health and Security

Miloš Ajčević<sup>1</sup>, Paolo Manganott<sup>2</sup>, Agostino Accardo<sup>1</sup>, Giovanni Furlanis<sup>2</sup>, Paola Polverino<sup>2</sup>, Aleksandar Miladinović<sup>1</sup>, Matteo Formigli<sup>3</sup>, Alessandro Marsich<sup>4</sup>, Sara Zanchiello<sup>5</sup>, Andrea Petronio<sup>3</sup>, Michela Cinello<sup>5</sup>

1. Università degli studi di Trieste
2. Ospedale universitario di Trieste
3. Feature Jam Srl
4. Televita Spa
5. Area Science Park

### Co-design social robotic system by using IDEO's HCD model

Claudia Porfirone<sup>1</sup>, Francesco Burlando<sup>1</sup>, Annapaola Vacanti<sup>1</sup>, Niccolò Casiddu<sup>1</sup>

1. Università di Genova

### Combining Microsoft Kinect and Hololens for a Novel Type of Augmented Reality Rehabilitation

Paolo Meriggi<sup>1</sup>, Luiz Evandro<sup>2</sup>, Michel Potts<sup>3</sup>, Xinyun Chen<sup>4</sup>, Martina Mandalà<sup>1</sup>, Elena Brazzoli<sup>1</sup>, Ivana Olivieri<sup>1</sup>

1. IRCCS Fondazione Don Carlo Gnocchi
2. VZLab&Vetor Zero
3. M2 Studio Inc.
4. NetEase Games Shanghai

### Comparing middle-aged and seniors' preferences toward virtual agents and android robots: Is there a generational shift in assistive technologies' preferences?

Anna Esposito<sup>1</sup>, Terry Amorese<sup>1</sup>, Marialucìa Cuciniello<sup>1</sup>, Gennaro Cordasco<sup>1</sup>, Filippo Cavallo<sup>2,3</sup>, Alessandro Vinciarelli<sup>4</sup>

1. Università della Campania "Luigi Vanvitelli"
2. Università degli studi di Firenze,
3. Scuola Superiore Sant'Anna
4. University of Glasgow

### Description of an Integrated Solution for Patient Management in a Nuclear Medicine Hospital Setting

Paolo Casacci<sup>1</sup>, Massimo Pistoia<sup>1</sup>

1. eResult srl

### Domho project: an accessible and inclusive smart co-housing solution for people with disability

Luciano Gamberini<sup>1</sup>, Patrik Pluchino<sup>1</sup>, Davide Bacchin<sup>1</sup>, Giulia Dainese<sup>2</sup>, Valentina Campagnaro<sup>2</sup>, Andrea Zanella<sup>1</sup>, Daniela Mapelli<sup>1</sup>, Sara Mondini<sup>1</sup>, Gianluca Campana<sup>1</sup>, Sabrina Cipolletta<sup>1</sup>, Anna Spagnoli<sup>1</sup>, Alberto Sozza<sup>3</sup>

1. Università di Padova
2. L'Incontro Social Enterprise
3. Rete Innovativa Regionale (RIR) Venetian Smart Lighting, Padova, Italy

### Human Work Sustainability Tool

Alessandra Papetti<sup>1</sup>, Marianna Ciccarelli<sup>1</sup>, Michele Germani<sup>1</sup>, Alessandro Leone<sup>2</sup>, Gabriele Rescio<sup>2</sup>, Pietro Siciliano<sup>2</sup>

1. Università Politecnica delle Marche
2. ICNR-IMM

### Integrated Measurement and Management System for Sarcopenia diagnosis

Luigi Accetta<sup>1</sup>, Filomena Addante<sup>2</sup>, Andrea Caroppo<sup>3</sup>, Francesco Ciliberti<sup>1</sup>, Francesco Giusto<sup>1</sup>, Alessandro Leone<sup>3</sup>, Luigi Patrono<sup>4</sup>, Gabriele Rescio<sup>3</sup>, Ilaria Sergi<sup>4</sup>, Daniele Sancarlo<sup>2</sup>

1. Intellego S.r.l.
2. Fondazione Casa Sollievo della Sofferenza
3. CNR-IMM
4. Università degli Studi del Salento

### Integrated services, small municipalities and quality of life: an institutional perspective

Monica De Angelis<sup>1</sup>, Andrea Monterù<sup>1</sup>

1. Università Politecnica delle Marche

### NeuroTS: Embodied based Motor Imagery Brain-Computer Interface feedback system for neurorehabilitation

Aleksandar Miladinović<sup>1</sup>, Miloš Ajčević<sup>1</sup>, Giulia Silveri<sup>1</sup>, Joanna Jarmolowsk<sup>1</sup>, Uros Marusic<sup>2,3</sup>, Piero Paolo Battaglini<sup>1</sup>, Agostino Accardo<sup>1</sup>

1. Università degli Studi di Trieste
2. Science and Research Centre Koper
3. University of Maribor

### Paving the Way to a Robotic Helper - A Case for Dance-Based Rehab Therapy

Amedeo Cesta<sup>1</sup>, Riccardo De Benedictis<sup>1</sup>, Alessandro Umbrico<sup>1</sup>, Roberta Bevilacqua<sup>2</sup>, Elvira Maranes<sup>2</sup>, Lorena Ross<sup>2</sup>, Ada Potenza<sup>3</sup>, Pierpaolo Di Bitonto<sup>3</sup>, Alessandra Sorrentino<sup>1</sup>, Laura Fiorini<sup>4</sup>, Filippo Cavallo<sup>4</sup>, Alessandro Leone<sup>5</sup>, Angela La Forgia<sup>6</sup>, Giovanni Melone<sup>6</sup>

1. CNR-ISTC Catania e Roma
2. INRCA
3. Grifomultimedia,
4. Scuola Superiore Sant'Anna
5. CNR-IMM,
6. Exprivia



**Preliminary studies of a model for a robot that creates an interactive communication with elderly people to satisfy their clothing item requests**

*Olivia Nocentin<sup>1</sup>, Filippo Cavallo<sup>1</sup>, Jaeseok Kim<sup>1</sup>*

1. Scuola Superiore Sant'Anna di Pisa

**SmartSatCare: A TV-based solution to face the COVID-19 crisis**

*Amedeo Cesta<sup>1</sup>, Tobia Castald<sup>2</sup>, Giuliana Chiesa<sup>2</sup>, Gabriella Cortellessa<sup>1</sup>, Francesca Fracasso<sup>1</sup>, Ullas Gallarato<sup>4</sup>, Javier Herrero Sanchez<sup>1</sup>, Fulvio Marchetti<sup>1</sup>, Andrea Orlandini<sup>1</sup>, Alessandro Umbrico<sup>1</sup>*

1. CNR – Istituto di Scienze e Tecnologie della Cognizione

3. Meetecho S.r.l.

2. ASL CN2

4. AgeendaWIFI S.r.l.

**Tele-Monitoring and Tele-Rehabilitation of the hand in Hemiplegic Patients: A preliminary Study**

*Luca Vismara<sup>1</sup>, Claudia Ferraris<sup>1</sup>, Valerio Votta<sup>1</sup>, Roberto Nerino<sup>1</sup>, Alessandro Mauro<sup>1</sup>,*

1. Università degli Studi di Torino

**Telemedicine and quality of life in the context of D-Sys-Com research**

*Stefania Pinnelli<sup>1</sup>, Maria Chiara Ruggieri<sup>1</sup>*

1. Università degli Studi del Salento

**Therapeutic exercise protocols for people recovering after Covid-19: a Tele-Health Approach**

*Lucia Pepa<sup>1</sup>, Martina Pigliapoco<sup>1</sup>, Paola Bisoglio, Alice Lambertucci<sup>1</sup>, Michela Coccia<sup>2</sup>, Lauredana Ercolan<sup>2</sup>, Michela Aringolo<sup>2</sup>, Margherita Hi-be<sup>2</sup>, Anna Gastald<sup>2</sup>, Elisa Andrenell<sup>2</sup>, Rossella Cima<sup>2</sup>, Luca Spalazzi<sup>1</sup>, Maria Gabriella Ceravolo<sup>1,2</sup>, Marianna Capecci<sup>1,2</sup>*

1. Politecnico delle Marche

2. Clinica Neuroreabilitativa AOU Ospedali Riuniti di Ancona