```
@misc{EMCD,
 abstract = {Scope and objectives of the directive, guidance,
standardisation, notified bodies, workshops, and contact points.},
 author = {Internal Market, Industry, Entrepreneurship and SMEs},
 title = {Electromagnetic Compatibility (EMC) Directive},
 url =
{https://single-market-economy.ec.europa.eu/sectors/electrical-and-electroni
c-engineering-industries-eei/electromagnetic-compatibility-emc-
directive_en},
 urldate = {28.05.2025}
 year = {2025},
 address = "{[Accessed in Mai 2025]}",
}


@misc{LVD,
 abstract = {About the directive, implementation and guidance,
standardisation, and contact points.},
 author = {Internal Market, Industry, Entrepreneurship and SMEs},
 title = {Low Voltage Directive (LVD)},
 url =
{https://single-market-economy.ec.europa.eu/sectors/electrical-and-electroni
c-engineering-industries-eei/low-voltage-directive-lvd_en},
 urldate = {28.05.2025}
 year = {2025},
 address = "{[Accessed in Mai 2025]}",
}


@misc{MD,
 abstract = {EU legislation, guidance documents, notified bodies,
recommendation for use sheets, and coronavirus response in relation to
additive manufacturing capacity.},
 author = {Internal Market, Industry, Entrepreneurship and SMEs},
 title = {Machinery},
 url =
{https://single-market-economy.ec.europa.eu/sectors/mechanical-engineering/m
achinery_en},
 urldate = {28.05.2025}
 year = {2025},
 address = "{[Accessed in Mai 2025]}",
}


@misc{RED,
 abstract = {Regulatory framework for placing radio equipment on the EU
market, telecommunication conformity assessment and market surveillance
committee, and guidance.},
 author = {Internal Market, Industry, Entrepreneurship and SMEs},
 title = {Radio Equipment Directive (RED)},
 url =
```

```
{https://single-market-economy.ec.europa.eu/sectors/electrical-and-electronic-engineering-industries-eei/radio-equipment-directive-red_en},
 urldate = {28.05.2025}
 year = {2025},
 address = "{[Accessed in Mai 2025]}",
}


@misc{RoHS,
 abstract = {Discover EU rules on the restriction of hazardous substances in electrical and electronic equipment (RoHS in EEE).},
 author = {Internal Market, Industry, Entrepreneurship and SMEs},
 title = {RoHS Directive},
 url = {https://environment.ec.europa.eu/topics/waste-and-recycling/rohs-directive_en},
 urldate = {28.05.2025}
 year = {2025},
 address = "{[Accessed in Mai 2025]}",
}




@misc{HomebioGasinAtataIsland,
 author = {Merav},
 title = {Rebuilding `Atata Si'i: A Story of Resilience, Partnership, and Innovation - HomeBiogas},
 url = {https://www.homebiogas.com/blog/turning-disaster-into-opportunity-atata-sii-story/},
 urldate = {27.03.2025},
 year = {2024},
 address = "{[Accessed in April 2025]}",
}


@misc{LomiBloom,
 author = {Lomi},
 title = {Kitchen Countertop Food Recycler | Lomi},
 url = {https://lomi.com/?srsltid=AfmBOoqWM2gAZKXZLMFGvlUYHb8JR90ZYC3HLmeaNJydYy7adh25lTFUc},
 urldate = {02.04.2025},
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}

@misc{Soilkind,
 author = {Soilkind},
```

```
 title = {Komposter von soilkind | frischer Kompost in 48 Stunden},
 url =
{https://www.soilkind.com/?srsltid=AfmBOoo6fXPM7mdL6DXH8IkSI1QJM94pAo8zVtDKeE4j2nS9KUIZsQ5u},
 urldate = {02.04.2025},
 year = {2025},
 address = "{[Accessed in April 2025]}",
}

@misc{GrundlagenstudieKompostierung,
 author = "{Amlinger, Florian}",
 title = "{Stand der Technik der Kompostierung - Grundlagenstudie}",
 url =
"{https://www.bmk.gv.at/themen/klima_umwelt/abfall/Kreislaufwirtschaft/verwertung/bio/kompostierung.html}",
 urldate = "{01.04.2025}",
 year = "{2025}",
 address = "{[Accessed in April 2025]}",
}

@misc{ThePerfectCompostRecipe,
 author = "{GrowVeg}",
 title = "{The Perfect Compost Recipe}",
 url = "{https://www.growveg.com/guides/the-perfect-compost-recipe/}",
 urldate = "{27.03.2025}",
 year = "{2025}",
 address = "{[Accessed in April 2025]}",
}


@misc{SWOTAnalysis,
 author = "{Asana}",
 title = "{SWOT-analyse: Wat is het en hoe gebruikt u het (met voorbeelden)}",
 url = "{https://asana.com/nl/resources/swot-analysis}",
 urldate = "{27.03.2025}",
 year = "{2025}",
 address = "{[Accessed in April 2025]}",
}

@misc{ActivatedCarbonFilters,
  author  = "{Breathe Naturally}",
  title   = "{Activated Carbon Filters: What Do They Remove from Your Air?}",
  url     =
"{https://www.breathenaturally.com/blogs/faq/activated-carbon-filters}",
  urldate = "{27.03.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}
```

```
@misc{Bokashi,
  author  = "{Mdr.de}",
  title   = "{Mit dem Bokashi-Eimer aus Küchenabfällen Dünger machen |
MDR.DE}",
  url     =
"{https://www.mdr.de/mdr-garten/pflegen/duengen/bokashi-eimer-kompost-kueche
nabfaelle-duenger-102.html}",
  urldate = "{02.04.2025}",
  year    = "{2023}",
  address = "{[Accessed in April 2025]}",
}

@misc{CEERCLE,
  author  = "{Ceercle}",
  title   = "{Composteurs design d'intérieur comme extérieur - Ceercle}",
  url     = "{https://ceercle.eu/categorie-produit/composteurs/}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{CodeEthicsCivilEngBelgian,
  author  = "{Bouwen aan ethiek}",
  title   = "{Home2}",
  url     = "{https://www.bouwenaanethiek.be/#downloads}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{CompostRecipe,
  author  = "{GrowVeg}",
  title   = "{The Perfect Compost Recipe}",
  url     = "{https://www.growveg.com/guides/the-perfect-compost-recipe/}",
  urldate = "{01.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{CompostTurning,
  author  = "{Muaid S. Ali}",
  title   = "{Compost Turning: The Key to Quick Composting - Oklahoma State
University}",
  url     =
"{https://extension.okstate.edu/fact-sheets/compost-turning-the-key-to-quick
-composting.html}",
  urldate = "{01.04.2025}",
  year    = "{2017}",
  address = "{[Accessed in April 2025]}",
}
```

```
@misc{EngineeringEthicsVDI,
  author  = "{VDI}",
  title   = "{Ethische Grundsätze}",
  url     = "{https://www.vdi.de/themen/ethische-grundsaetze}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{EthicalFrenchCharter,
  author  = "{Iesf}",
  title   = "{Actualités - IESF}",
  url     = "{https://www.iesf.fr/}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{EthicsAndDeontologyInBusiness,
  author  = "{Frezza, Eldo}",
  title   = "{Ethics and Deontology in Business}",
  url     =
"{https://austinpublishinggroup.com/business-administration-and-management/fulltext/ajbam-v1-id1007.php}",
  urldate = "{02.04.2025}",
  year    = "{2017}",
  address = "{[Accessed in April 2025]}",
}

@misc{Foodcycler,
  author  = "{FoodCycler}",
  title   = "{Features | FoodCycler}",
  url     = "{https://foodcycler.com/pages/features}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{Geme,
  author  = "{GEME Composter}",
  title   = "{Hoe werkt het}",
  url     = "{https://www.geme.bio/nl/how-it-works}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{GoveeLifeComposter,
  author  = "{AMAZON}",
  title   = "{GoveeLife Smart Elektrischer Komposter für Küche}",
  url     =
```

```
"{https://www.amazon.com/GoveeLife-Electric-Composter-Auto-Cleaning-Fertilizer/dp/B0D2NDK3R2}",
  urldate = "{27.03.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{Greenzy,
  author  = "{Greenzy}",
  title   = "{Écologie et élégance | Composteur intelligent et sans odeur}",
  url     = "{https://greenzy.eu/pages/le-composteur}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{GreenzyTechnology,
  author  = "{Greenzy}",
  title   = "{Greenzy Technology | Innovative indoor composter}",
  url     = "{https://greenzy.eu/en/pages/notre-technologie}",
  urldate = "{27.03.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{Hotbin,
  author  = "{HOTBIN Nederland en Belgie}",
  title   = "{HOTBIN Nederland & België}",
  url     =
"{https://www.hotbincomposting.nl/?srsltid=AfmBOopKk04n7qrIAn2BD87a3QpE7xs3x4mKppFbuH2wNkr0nqeyaZ_E}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}

@misc{Innovagoods,
  author  = "{InnovaGoods}",
  title   = "{Electric Kitchen Composter Ewooster InnovaGoods - InnovaGoods}",
  url     =
"{https://business.innovagoods.com/product/electric-kitchen-composter-ewooster-innovagoods/}",
  urldate = "{02.04.2025}",
  year    = "{2024}",
  address = "{[Accessed in April 2025]}",
}

@misc{KompostenImOekolandbau,
  author  = "{Lammert, Benjamin and Weissbart, Joseph and Groschupp, Christine and Vetter, Reinhold and Berner, Alfred and Leclerc, Blaise and
```

```
Schaub, Christiane}",
  title   = "{Stickstoffverfügbarkeit von Komposten im Ökolandbau}",
  url     = "{https://orgprints.org/id/eprint/2448/}",
  urldate = "{02.04.2025}",
  year    = "{2002}",
  address = "{[Accessed in April 2025]}",
}

@misc{Reencle,
  author  = "{reencle}",
  title   = "{Reencle Homepage -YH}",
  url     = "{https://reencle.co/pages/main-b}",
  urldate = "{02.04.2025}",
  year    = "{2025}",
  address = "{[Accessed in April 2025]}",
}


@article{3DPrintingWithVinyl/PVC,
    author = "All3DP",
    title = "3D Printing with Vinyl / PVC Filament: All You Need to Know",
    journal = "All3DP",
    year = "2020",
    url = "https://all3dp.com/2/can-you-3d-print-pvc-simply-explained/",
    urldate = "02.04.2025",
    abstract = "3D printing with PVC can be harmful and corrosive to your
printer. But what to do if you still need it? Read on to learn more."
}

@article{PsOfMarketing,
    author = "Twin, Alexandra",
    title = "4 Ps of Marketing: What They Are & How to Use Them
Successfully",
    journal = "Investopedia",
    year = "2010",
    url = "https://www.investopedia.com/terms/f/four-ps.asp",
    urldate = "02.04.2025",
    abstract = "The 4 Ps are the key factors in marketing a product or
service to consumers: product, price, place, and promotion. They are also
known as a marketing mix."
}

@article{CaseStudyPoland,
    author = "Sulewski, Piotr and Kais, Karolina and Gołas, Marlena and
Rawa, Grzegorz and Urbańska, Klaudia and Wąs, Adam",
    title = "Home Bio-Waste Composting for the Circular Economy",
    journal = "Energies",
    volume = "14",
    number = "19",
    pages = "6164",
    year = "2021",
```

```
    issn = "1996-1073",
    doi = "10.3390/en14196164",
    url = "https://www.mdpi.com/1996-1073/14/19/6164"
}

@article{ControlOdor,
    author = "Park, K. J. and Choi, M. H. and Hong, J. H.",
    title = "Control of Composting Odor Using Biofiltration",
    journal = "Compost Science & Utilization",
    volume = "10",
    number = "4",
    pages = "356--362",
    year = "2002",
    issn = "1065-657X",
    doi = "10.1080/1065657X.2002.10702098"
}

@article{HomeCompostingInShiraz,
    author = "Jalalipour, Haniyeh and Binaee Haghighi, Azadeh and Ferronato,
Navarro and Bottausci, Sara and Bonoli, Alessandra and Nelles, Michael",
    title = "Social, economic and environmental benefits of organic waste
home composting in Iran",
    journal = "Waste management & research : the journal of the
International Solid Wastes and Public Cleansing Association, ISWA",
    volume = "43",
    number = "1",
    pages = "97--111",
    year = "2025",
    doi = "10.1177/0734242X241227377",
    abstract = "Organic waste management is challenging in low-middle income
countries. Environmental impacts and high management costs affect the
sustainable development of cities, an issue that is exacerbated by the lack
of social involvement."
}

@article{KuechenabfallNutzen,
    author = "Patrizia Messmer",
    title = "Kompost in der Stadt: Tipps, um Küchenabfälle zu verwerten",
    journal = "Neue Zürcher Zeitung",
    year = "2022",
    url =
"https://bellevue.nzz.ch/kochen-geniessen/kochwissen/kompost-in-der-stadt-ti
pps-um-kuechenabfaelle-zu-verwerten-ld.1684701",
    urldate = "01.04.2025",
    abstract = "In den Städten landet der Bio-Müll einfachheitshalber oft in
der Kehrichtverbrennung. Dabei geht Kompostieren auch in der Stadt. Drei
einfache und geruchlose Methoden für drinnen und auf dem Balkon."
}

@article{MoistureContent,
    author = "Gurusamy, Nisha N. and Puffer, Natalie and de Jongh, Coen and
```

```
Rodriguez Gil, Cristina and Aspray, Thomas J.",
    title = "Effect of initial moisture content and sample storage duration
on compost stability using the ORG0020 dynamic respiration test",
    journal = "Waste Management",
    year = "2021",
    abstract = "Biological tests are widely used to assess composting
process status and finished material stability. Although compost stability
is known to be influenced by moisture content (MC) and storage duration,
there is a lack of data supporting boundary limits for standardized
testing."
}


@article{EthicsInSalesAndMarketing,
  author = "Madhani, Pankaj M.",
  year = "2020",
  title = "Ethics in Sales and Marketing: Key Advantages",
  journal = "Marketing Mastermind",
  volume = "17",
  number = "5",
  pages = "53--58",
  year = "2020",
  url =
"https://bellevue.nzz.ch/kochen-geniessen/kochwissen/kompost-in-der-stadt-ti
pps-um-kuechenabfaelle-zu-verwerten-ld.1684701",
  urldate = "01.04.2025",
}

@book{LetsGetGrowing,
  author = {Schwarz, Mary and Bonhotal, Jean},
  year = {2017},
  title = {School Composting - Let's Get Growing},
  publisher = {Cornell University},
  address = {Ithaca, NY},
  doi = {607-255-1187}
}









@article{Hamza2023,
title = {BeeLive: The IoT platform of Beemon monitoring and alerting system
for beehives},
journal = {Smart Agricultural Technology},
volume = {6},
pages = {100331},
year = {2023},
issn = {2772-3755},
```

```
doi = {https://doi.org/10.1016/j.atech.2023.100331},
url = {https://www.sciencedirect.com/science/article/pii/S2772375523001600},
author = {Abdelbaset S. Hamza and Rahman Tashakkori and Bejamen Underwood
and William O'Brien and Chris Campell},
keywords = {Beehive, Honey bees, Internet-of-Things (IoT)},
abstract = {Monitoring honey beehives is mainly done manually by beekeepers
to evaluate the health of their hives and determine their growth and yield.
With the emergence of Internet of Things (IoT) devices and tools, there have
been some efforts in recent years to automate such monitoring. This can
significantly benefit beekeepers as they can obtain critical data and
insight into their hives' health and performance more regularly. In this
paper, we use IoT devices and the Thingsboard dashboard to track the status
of 28 honey beehives installed in the Western region of North Carolina as
part of the Appalachian Multi-Apiary Informatics System (AppMAIS) project.
In order to acquire data from a beehive, humidity and temperature sensors,
as well as a microphone, have been placed inside the hives. In addition, a
video camera has been placed at the top of the hive's entrance to obtain
video recordings of the bees entering and leaving the hives, and a scale is
placed under the hive to report the weight. The data collected from the
sensors and peripherals installed in each of the AppMAIS hives are sent to
the Thingsboard dashboard for management and visualization. In this paper,
we report on our success with Thingsboard IoT tool to monitor honey beehives
and take advantage of their capabilities to interact with the devices as
needed to adjust operational parameters.}
}

@InProceedings{Reis2020,
    author="dos Reis, Alexandre Soares
    and Gielen, Elien
    and Wopereis, Ko
    and Pasternak, Marcel
    and Sooäär, Vaido
    and Schneider, Tobias
    and Duarte, Abel J.
    and Malheiro, Benedita
    and Justo, Jorge
    and Ribeiro, Cristina
    and Silva, Manuel F.
    and Ferreira, Paulo
    and Guedes, Pedro",
    editor="Silva, Manuel F.
    and Luís Lima, José
    and Reis, Luís Paulo
    and Sanfeliu, Alberto
    and Tardioli, Danilo",
    title="Smart Companion Pillow -- An EPS@ISEP 2019 Project",
    booktitle="Robot 2019: Fourth Iberian Robotics Conference",
    year="2020",
    publisher="Springer International Publishing",
    address="Cham",
    pages="465--476",
```

```
    abstract="This paper describes the design and development of a Smart
Companion Pillow, named bGuard, designed by a multinational and
multidisciplinary team enrolled in the European Project Semester (EPS) at
Instituto Superior de Engenharia do Porto (ISEP) in the spring of 2019.
Nowadays, parents spend most of the day at work and become naturally worried
about the well-being of their young children, specially babies. The aim of
bGuard is to provide a 24-hour remotely accessible baby monitoring service,
contributing to reduce parenting stress. The team, based on the survey of
related products, as well as on marketing, sustainability, ethics and
deontology analyses, developed a remotely interactive Smart Companion Pillow
to monitor the baby's health and room air quality. The collected data, once
it is saved on an Internet of Things (IoT) platform, becomes remotely
accessible. The bGuard pillow, thanks to its shape, reduces the risk of the
baby rolling from back to tummy, lowering the risk of Sudden Infant Death
Syndrome (SIDS).",
    isbn="978-3-030-36150-1"
}

@article{Lee2018,
    title = "Design and Implementation of Monitoring System Architecture for
Smart Bicycle Platform",
    journal = "Procedia Computer Science",
    volume = "134",
    pages = "464--469",
    year = "2018",
    note = "The 15th International Conference on Mobile Systems and
Pervasive Computing (MobiSPC 2018) / The 13th International Conference on
Future Networks and Communications (FNC-2018) / Affiliated Workshops",
    issn = "1877-0509",
    doi = "https://doi.org/10.1016/j.procs.2018.07.182",
    url =
"http://www.sciencedirect.com/science/article/pii/S1877050918311475",
    author = "YeongKyun Lee and Jongpil Jeong",
    keywords = "Remote monitoring, Wireless sensor network, Smart phone
based monitoring, Bicycle monitoring",
    abstract = "This paper proposes the smart phone as a central monitoring
device for the bicycle and the WIFI network as a communication channel
between the smart phone and the sensors. It will show how to implement the
sensor boards with WIFI and relevant firmware, the software on the smart
phone to communicate with the sensor boards and the evaluation results with
the open source software called Goldencheetah. The knowledge in this paper
is not limited to bicycles but can be expanded to any other monitoring
systems using the remote sensors based on smart phone."
}

@article{Ranjith2020,
    title = "Prediction of Exhaust Gas Emission characteristics using Neem
oil blended bio-diesel in diesel engine",
    journal = "Materials Today: Proceedings",
    volume = "21",
    pages = "870 - 875",
```

```
    year = "2020",
    note = "International Conference on Recent Trends in Nanomaterials for
Energy, Environmental and Engineering Applications",
    issn = "2214-7853",
    doi = "https://doi.org/10.1016/j.matpr.2019.07.706",
    url =
"http://www.sciencedirect.com/science/article/pii/S2214785319329116",
    author = " Ranjith and V. Velmurugan and S. Thanikaikarasan",
    keywords = "Accelerometer, Diesel engine, Neem oil, Renewable,
Alternative, Viscosity, Volatility",
    abstract = "As a renewable, sustainable and alternative fuel for diesel
engine, biodiesel instead of diesel has been increasingly fuelled to study
its effects on engine performances and emissions. Biodiesel production is a
modern and technological area for researchers due to constant increase in
the prices of petroleum, diesel, and environmental advantages. Increased
environmental awareness and depletion of resources are driving industry to
develop viable alternative fuels from renewable resources that are
environmentally more acceptable. Neem oil is a potential alternative fuel.
The most detrimental properties of neem oils are its high viscosity and low
volatility, and these cause several problems during their long duration
usage in diesel engines. From the review it is found that the use of
biodiesel leads to the substantial reduction in CO2, HC, CO and NOx
emissions."
}

@article{Sobhani2018,
    title = "Impact of smartphone distraction on pedestrians crossing
behaviour: An application of head-mounted immersive virtual reality",
    journal = "Transportation Research Part F: Traffic Psychology and
Behaviour",
    volume = "58",
    pages = "228 - 241",
    year = "2018",
    issn = "1369-8478",
    doi = "https://doi.org/10.1016/j.trf.2018.06.020",
    url =
"http://www.sciencedirect.com/science/article/pii/S1369847818300998",
    author = "Anae Sobhani and Bilal Farooq",
    keywords = "Head-mounted immersive virtual reality, Pedestrian,
Distracted street crossing, Multi-tasking, Smartphone use, Surrogate
analysis, Smart LED lights safety treatment",
    abstract = "A novel head-mounted virtual immersive/interactive reality
environment (VIRE) is utilized to evaluate the behaviour of participants in
three pedestrian road crossing conditions while 1) not distracted, 2)
distracted with a smartphone, and 3) distracted with a smartphone with a
virtually implemented safety measure on the road. Forty-two volunteers
participated in our research who completed thirty successful (complete
crossing) trials in blocks of ten trials for each crossing condition. For
the two distracted conditions, pedestrians are engaged in a maze-solving
game on a virtual smartphone, while at the same time checking the traffic
for a safe crossing gap. For the proposed safety measure, smart flashing and
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color changing LED lights are simulated on the crosswalk to warn the distracted pedestrian who initiates crossing. Surrogate safety measures as well as speed information and distraction attributes such as direction and orientation of participants head were collected and evaluated by employing a Multinomial Logit (MNL) model. Results from the model indicate that females have more dangerous crossing behaviour especially in distracted conditions; however, the smart LED treatment reduces this negative impact. Moreover, the number of times and the percentage of duration the head was facing the smartphone during a trial and a waiting time respectively increase the possibility of unsafe crossings; though, the proposed treatment reduces the safety crossing rate. Hence, our study shows that the smart LED light safety treatment indeed improves the safety of distracted pedestrians and enhances the successful crossing rate."
}

@article{Obayashi2020,
    title = "Pilot and Feasibility Study on Elderly Support Services Using Communicative Robots and Monitoring Sensors Integrated With Cloud Robotics",
    journal = "Clinical Therapeutics",
    year = "2020",
    issn = "0149-2918",
    doi = "https://doi.org/10.1016/j.clinthera.2020.01.001",
    url = "http://www.sciencedirect.com/science/article/pii/S0149291820300278",
    author = "Kazuko Obayashi and Shigeru Masuyama",
    keywords = "activities of daily living, cloud robotics, communicative robot, elderly care, robotics utilization, support services",
    abstract = "Purpose
    This pilot before-after study investigated the possible effects of communicative robots, used with a sensing system supported by cloud robotics, in caring for elderly people.
    Methods
    Two elderly women in nursing homes and 4 care workers participated in the trial. The overnight life rhythm assessments of the study participants and care workers were surveyed to determine when and how the robots should be integrated into care. The system consisted of the robot Sota, a noncontact vital sensor and a sheet-shaped bed sensor. Real-time sensing data and conversations between the participants and robots were sent to the servers, prompting a quick verbal response by the robot supported by cloud robotics.
    Findings
    Care workers devoted 3 h to the maintenance of records during their most stressful periods. Automatic recording of vital information using robot sensors can improve the quality of nursing care work. Care workers' stress levels were maximized when responding to nurse calls. Temporary responses to nurse calls by the robots may help to effectively reduce the burden on nursing care workers. Robots can stimulate elderly people to communicate more with others (P < 0.05). Appropriate vocalization by communicative robots may prevent the deterioration of quality of life in elderly individuals.
    Implications
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    Communicative robots, used with a sensing system, may stimulate elderly
people to activate a communication link with others and help care workers to
effectively reduce the burden during the night shift. A follow-up study
involving a broader research program on communicative robots and elderly
care would be beneficial."
}

@article{Thapa2019,
    title = "Study on the wintry thermal improvement of makeshift shelters
built after Nepal earthquake 2015",
    journal = "Energy and Buildings",
    volume = "199",
    pages = "62 - 71",
    year = "2019",
    issn = "0378-7788",
    doi = "https://doi.org/10.1016/j.enbuild.2019.06.031",
    url =
"http://www.sciencedirect.com/science/article/pii/S0378778819306309",
    author = "Rita Thapa and Hom Bahadur Rijal and Masanori Shukuya and
Hikaru Imagawa",
    keywords = "Nepal, Earthquake, Temporary shelters, Indoor air
temperature, Thermal insulation, Thermal improvement",
    abstract = "After massive earthquake 2015, thousands of Nepalese who
lost their permanent houses by the hardest hits were forced to live in
makeshift temporary shelters. The field measurement on indoor thermal
environment in five shelters was conducted in one of the district hit by the
earthquake, Lalitpur, in winter. The mean indoor and outdoor air
temperatures during the measured nighttime were found to be 10.3 °C and 7.6
°C, respectively, and the nocturnal indoor air temperature remained below
the lowest acceptable temperature of 11 °C. This result assured that these
shelters are not good for winter and must create various problems. We
therefore analyzed the thermal characteristics of those shelters based on
the measured results in order to seek a possible improvement. The total heat
loss coefficient estimated per floor area in five shelters ranged from 11.3
to 15.2 W/(m2·K); that is thermal insulation was very low. We made a simple
numerical analysis on the variation of indoor air temperature with the
assumption of improved thermal characteristics and thereby found that it
needs to be reduced about 2~7 W/(m2·K) to have the indoor air temperature
higher than 11 °C for 70\% of the whole nocturnal hours. Such reduction of
heat loss was found to be realized by adding affordable materials, e.g.,
cellular polyethylene foam and clothes for respective walls and roof. Thus,
the knowledge obtained from this study should hopefully be applied to actual
improvement of indoor thermal environment in existing shelters and also to a
development for the preparation against future disaster."
}

@MISC{gartner2021,
  author  = "{Gartner}",
  title   = "{Gartner Magic Quadrant for Data Science and Machine Learning
Platforms}",
  url     = "{https://www.gartner.com/en/documents/3998753}",
```

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  urldate = "{March 2021}",
  year    = "{2021}",
  address = "{[Accessed in April 2021]}",
}

@MISC{android41,
  author  = "{Android Open Source Project}",
  title   = "{Android Developers: Android 4.1 APIs}",
  url     =
"{http://developer.android.com/about/versions/android-4.1.html}",
  urldate = "{May 2014}",
  year    = "{2014}",
  address = "{[Accessed in April 2017]}",
}

@MISC{cloudexpo2008,
  AUTHOR  = "{Cloud Expo}",
  title   = "{Twenty-One Experts Define Cloud Computing}",
  url     = "{http://cloudcomputing.sys-con.com/node/612375}",
  urldate = "{October 2013}",
  year    = "{2008}",
  address = "{[Accessed in April 2021]}",
}

@BOOK{Bandyopadhyay2013,
  title={Unsupervised Classification: Similarity Measures, Classical and
Metaheuristic Approaches, and Applications},
  author={Bandyopadhyay, Sanghamitra and Saha, Sriparna},
  year={2013},
  isbn={978-3-642-32450-5},
  publisher={Springer},
  address = {Berlin, Germany},
  doi = {10.1007/978-3-642-32451-2}
}


@ARTICLE{Llorente2009,
  author  ="{Sotomayor, B. and Montero, Ruben S. and Llorente, I.M. and
Foster, I.}",
  journal ="Internet Computing, IEEE",
  title   ="{Virtual Infrastructure Management in Private and Hybrid
Clouds}",
  year    ="{2009}",
  month   ="{Sept}",
  volume  ="{13}",
  number  ="{5}",
  pages   ="{14-22}",
  abstract = {One of the many definitions of "cloud" is that of an
infrastructure-as-a-service (IaaS) system, in which IT infrastructure is
deployed in a provider's data center as virtual machines. With IaaS clouds'
growing popularity, tools and technologies are emerging that can transform
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an organization's existing infrastructure into a private or hybrid cloud. OpenNebula is an open source, virtual infrastructure manager that deploys virtualized services on both a local pool of resources and external IaaS clouds. Haizea, a resource lease manager, can act as a scheduling back end for OpenNebula, providing features not found in other cloud software or virtualization-based data center management software.},
  doi = {10.1109/MIC.2009.119}
}

@article{Mulder2013,
    title = "Development of a Motion System for an Advanced Sailing Simulator ",
    journal = "Procedia Engineering",
    volume = "60",
    number = "0",
    pages = "428 - 434",
    year = "2013",
    note = "6th Asia-Pacific Congress on Sports Technology (APCST) ",
    issn = "1877-7058",
    doi = "http://dx.doi.org/10.1016/j.proeng.2013.07.030",
    url = "http://www.sciencedirect.com/science/article/pii/S1877705813010813",
    author = "Fabian A. Mulder and Jouke C. Verlinden",
    keywords = "Sailing",
    keywords = "Dinghy",
    keywords = "Virtual reality",
    keywords = "Training simulation",
    keywords = "Force feedback",
    abstract = "Abstract To train competitive sailing in a virtual setting, motion of the boat as well as haptic feedback of the sail lines is essential. When discussing virtual environments (VEs) the concept of presence is often used. In this study we develop a sailing simulator motion system to research what factors contribute to the participants’ sensation of presence when sailing in a VE. The developed simulator includes the development of a mainsheet force feedback system and a novel motion platform, connected to a high-quality graphics sailing simulation. In future research, the developed system will be used to study which sail training type can be performed in simulated environments, and if the system can be used as a valid testbed for perception-action experiments."
}

@article{Mahn2006,
title = {A BEHAVIOUR-BASED NAVIGATION SYSTEM FOR AN AUTONOMOUS INDOOR BLIMP},
journal = {IFAC Proceedings Volumes},
volume = {39},
number = {16},
pages = {837-842},
year = {2006},
note = {4th IFAC Symposium on Mechatronic Systems},
issn = {1474-6670},
```

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doi = {https://doi.org/10.3182/20060912-3-DE-2911.00144},
url = {https://www.sciencedirect.com/science/article/pii/S1474667015342725},
author = {Manuel Mahn and Markus Kemper},
keywords = {control, indoor navigation},
abstract = {This paper describes a behaviour-based navigation system for
airborne autonomous robots. The work has been validated by controlling an
indoor blimp with a finite-state machine. It is shown that behaviour-based
navigation, especially concerning mobile robots for indoor applications, is
predestined to perform reconnaissance of unknown areas and moreover for
navigation tasks in familiar environment. Due to the inability of most
autonomous indoor aerial vehicles to carry heavy sensors, these systems lack
of metrical information and therefore the explicit localization is yet
impossible until today. The behaviour-based navigation is combined with a
variety of path-planning methods (tree-search, potential fields, etc.) using
obstacle-maps of known surroundings enabling the robot to acquire a desired
position in a correspondent cluster of rooms.}
}

@INPROCEEDINGS{Khan2018,
  author={Khan, Tareq},
  booktitle={2018 IEEE International Conference on Electro/Information
Technology (EIT)},
  title={A Smart Wearable Gadget for Noninvasive Detection and Notification
of Diaper Moister},
  year={2018},
  volume={},
  number={},
  pages={0240-0244},
  abstract={Wearing a wet diaper for a long time can be uncomfortable and
cause health issues such as diaper rash. The best way to avoid diaper rash
is to change the diaper often and as soon as possible after the baby
urinates or passes stool. Daycare caregivers or parents sometimes forget or
do not have time to manually check the diaper condition of the babies
throughout the day. In this age of smart devices, many people are busy with
their cell phones or tablets for social networking, texting, gaming, music
etc. In this project, a novel wearable gadget is developed which sends an
automatic notification to caregivers smart devices whenever the baby
urinates. The proposed wearable detects urination event noninvasively by
sensing the temperature rise on the outer surface of the diaper. The gadget
is a small size, low power, low cost and reusable electronic device that is
attached externally to the outer surface of the diaper using hook-and-Ioop
fasteners. The gadget can be used with any disposable diaper, thus no change
in the diaper production process or price increase is required. The
smartphone app logs the urination events and creates databases and reports.
This record can facilitate treating disease such as dehydration, where
accurate previous records of urination are required. A prototype of the
hardware gadget and a smartphone app is developed and tested.},
  keywords={},
  doi={10.1109/EIT.2018.8500233},
  ISSN={2154-0373},
  month={May},
```

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}
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