Smart Cities Vertical

Tagline

Sustainable and smart urbanization is key to successful development. We focus on solutions that advance the smart technology of businesses and cities.

Vertical Description

Our goal is to maintain a high quality of life and competitive advantage compared to international locations while advancing smart technology solutions that increase the sustainability and resilience of local and global businesses and cities. Through their technologies and products, our startups solve specific innovation challenges defined by corporations and cities in Switzerland and beyond.

Partners

- Coop
- AXA
- Swisscom
- City of Zurich
- Romande Energie
- CSEM

Technologies

- AI/Machine Learning
- Augmented Reality (AR) / Virtual Reality (VR) / Extended Reality (XR)
- Autonomous Systems (AS)
- Big Data and Data Analytics (e.g. BIM and GIS, Digital Twins)
- Conversational Interfaces (Voice, Chatbots, etc.)
- Confidential Computing
- Cloud hyperscalers
- Communication Technologies (e.g, 5G, LoraWAN, Satellites)
- Data Visualization
- Quantum Computing
- Internet of Things (IoT)
- Robotics (incl. M2M)
- Location Intelligence
- Web3

Collaboration Areas

- Digital Twins / Data-Driven Initiatives
- Energy
- Mobility & Logistics
- Building and Living
- City Services
- Net Zero

Collaboration Opportunities

Digital Twin and Data-Driven Initiatives

- Digital twins for waste management

- Digital twins to trace products within different departments in retail

- New technologies for rapid recording of damage to buildings in the event of a major meteorological event (hail, storm, etc.)

- Solutions that improve data models for adjusting automated indoor temperature management (heating and cooling)

- As the City of Zurich, we want to promote and make accessible digital solutions for the reuse, repair, and sharing of consumer goods so that all residents are empowered to act according to the principles of the circular economy.

- Collecting data in urban and production environments to enhance and improve the accuracy of digital twins - focusing on sensing and tracking, and how sensors are used (e.g. mobility and traffic, infrastructure such as water systems, people flow, and the utilization of public spaces).

Energy

- Solutions to analyze and implement CO2 and energy-saving potentials in retail processes and production companies

- Applications and platforms to identify low-energy pricing for retail companies and beyond

- Solutions to reuse the energy output in production lines

- Solutions to manage congestion and flexibility in electricity grids with approaches/business models that are attractive for utilities in Switzerland

- Innovative approaches/business models to access and valorize the data from smart electricity meters in Switzerland

- Platforms to recruit and manage members of local energy communities

- Trading platforms to collect and manage energy efficiency certificates

- Environmentally friendly, with short- and long-term energy control and storage to ensure smooth consumption and prices

- Value-added services for energy services (e.g. EV charging), additional services enriching existing DSO services

Mobility & Logistics

- As the City of Zurich, we want to work with start-ups and logistics companies to test innovative solutions to achieve scalable logistics for the reuse, repair, and sharing of consumer goods by 2035, so that the circular economy can be made accessible and indirect emissions from consumption can be reduced.

- Digital services, IT solutions, and platforms (incl. IoT, MaaS), or AI algorithms to improve mobility, parking, and logistics challenges

- Solutions/technologies to improve mobility flow prediction

- Solutions/technologies to forecast the demand and supply in consumer goods production

- New technologies to make the logistics processes in distribution centers (picking/delivery) fully automated, more efficient, and user-friendly

- New solutions to reduce the environmental impact of commuting and business trips

- Mobility solutions (also for remote areas) and ways to encourage retail customers to travel more sustainably

- Increase of transportation and road safety as well as efficiency based on data from passenger crowd management and vehicle telematics

City Services

- Digitalization of city services for citizens (e.g. blended counseling, conversational interfaces) and/or employees

Buildings & Living

- Sustainable ways of designing new buildings (VR, AI, etc) with easy usage and application

- Ways to encourage a more flexible usage of living spaces e.g. transferring it from older to younger people

- Solutions to reuse existing buildings and flexibilize the usage of public or commercial buildings

- Ideas to increase and encourage biodiversity in construction and the built environment

- Ways to reduce heat and overcome urban heat islands in cities

- 3D simulation of the buildings to use showcase for customers

- Sensor/Solution that address the following topics: monitor the number of people in specific public spaces, multisensor solutions that gather different parameters like temp, humidity, noise, counting objects like people, bikes, or cars passing, object tracking, solutions that are specifically designed to gather data in the ground

- IoT Solutions that preventive solutions in the context of safety at work, health protection, and safety culture to avoid accidents and sickness absences

Net Zero

- Ways to "mainstream" and efficiently communicate the available circular offers: e.g. reuse, reselling, and upcycling of objects and goods to citizens (citizen engagement) and employees (comparability, demand-based service procurement, etc.)

- Green IT services and solutions to better assess, measure, and achieve CO2 reductions (esp. data centers, workplaces, IT infrastructure)

- New ideas and technologies for disposal and recycling processes in logistics and retail

- Solutions for cost-effective infrastructure to deal with return goods

- Ways to support and increase the circular economy in the construction industry in Switzerland, to encourage renovations and the reuse of construction materials

- Solutions to optimize deliveries in cities and reduce congestion and emissions (e.g. data sharing, book unloading, parking in advance, etc.)

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