Startup from northern Germany develops an AI-based software that identifies architectural design elements in urban environment contributing to criminal activities and street harassment and enables future crime prevention and safety of urban environment

Summary

Profile type	Company's country	POD reference
Technology offer	**Germany**	**TODE20230828011**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Commercial agreement with technical assistance** **Investment agreement** **Research and development cooperation agreement**	**• World**
Contact Person	**Term of validity**	**Last update**
Rita ELSTE - TOMSONE	**28 Aug 2023** **27 Aug 2024**	**28 Aug 2023**

General Information

Short summary

The startup is developing a software based on a deep learning model that provides urban planners, architects & public transport companies with the tools to evaluate the safety of the urban landscape. The tools will speed up the planning process & decrease crime & harassment rates & prevent the need to redesign due to safety reasons. The awarded startup seeks cooperation partners from public/private security & policing agencies & social organisations which have access to crime & harassment data.

Full description

Problem description:
Harassment and crime in public spaces are significant global challenges, causing psychological distress and severely restricting victims' everyday lives, including their choice of transport, physical activities, and freedom of movement within cities. To effectively combat crimes in public places and street harassment, we must recognize the design of cities as a crucial factor influencing safety and the perception of safety.

Research has consistently shown that the built environment and city design play a pivotal role in determining the

prevalence of crime and harassment in public areas. Factors such as mixed-land use, building density, intersection density, lighting, hedges, and windows can significantly impact crime rates and incidents of street harassment.

The solution:
Urban planners and architects have lacked technological tools to proactively consider security and crime prevention in the urban design process. The startup emerges as a cutting-edge AI-driven solution to identify design elements that may contribute to criminal activities and harassment. By leveraging advanced AI technology, the app can accurately pinpoint potential dangerous areas in existing urban landscapes and future design plans.

The AI model draws on a diverse dataset, including images of places in various cities, as well as textual and statistical reports of street harassment and crime incidents provided by victims. While the current version is based on data from limited cities in the EU, there is great potential for upscaling and expanding its informative value. To achieve this, more data about street harassment and crimes in public places from various EU cities, linked to specific locations, is essential.

This adaptability is a core strengths. By feeding the software with geographic and statistical data from different areas, it can easily be applied to other urban spaces, empowering urban planners, designers, and architects worldwide.

The primary customer base includes urban planners, designers, architects, and public transport companies seeking to optimize the location and connectivity of their transport networks in relation to safety. Moreover, governmental bodies, such as a Ministry of Urban Development and Environment, interested in investing in crime reduction, citizen well-being, and increased public transport usage, can greatly benefit from the ability to enhance safety.

Partnerships with public bodies, policing and security organizations, and social organizations focused on street harassment prevention and gender equity are sought. Additionally, funding opportunities and investors with an interest in AI and gender equity are addressed.

Advantages and innovations

1. Enhanced Safety: Advanced AI technology can accurately identify potential danger zones and crime hotspots in cities. This empowers urban planners/architects to make data-driven decisions that prioritize safety and reduce crime rates.
2. Crime Prevention through Design: One of the groundbreaking aspects is the focus on the relationship between city design and crime prevention. By considering factors such as mixed-land use, building density, lighting, and more, the software helps create urban environments that deter criminal activities and minimize incidents of street harassment.
3. Globally scaleable: The adaptability to different urban spaces is a significant advantage. By incorporating geographic and statistical data from various regions, the software can be seamlessly applied to cities worldwide.
4. Comprehensive Data Analysis: The AI model draws on a diverse dataset that includes images, textual reports, and statistical information related to street harassment and crimes in public places. This comprehensive approach ensures a holistic understanding of the safety in each city, enabling more informed decision-making for city planning.
5. Empowering Stakeholders: The SME caters to a wide range of stakeholders, incl; urban planners, architects, public transport companies, and governmental bodies.
6. Social Impact and Gender Equity: Partnerships with organizations focused on street harassment prevention and gender equity are sought. By prioritizing inclusivity and safety, the software contributes to fostering a more equal and respectful urban environment for all.
7. Continuous Improvement: The team is committed to constant refinement and expansion. By seeking additional data from different cities, the software aims to upscale its capabilities and increase its informative value. This commitment to improvement ensures that the SME remains at the forefront of crime prevention and safety-enhancing technologies.

Technical specification or expertise sought

Stage of development

Under development

Sustainable Development goals

- **Goal 3: Good Health and Well-being**
- **Goal 5: Gender Equality**
- **Goal 11: Sustainable Cities and Communities**

IPR Status

No IPR applied

Partner Sought

Expected role of the partner

- Public and private security organisations
- Social organisations with the focus on
  - gender equity

- Street harassment
- Women and LGBTQ+ safety
- Public housing

- Public authorities striving for the improvement of their citizens' well-being
- Ministries related to urban development, and housing

Type of partnership

Commercial agreement with technical assistance

Investment agreement

Research and development cooperation agreement

Type and size of the partner

- **SME <=10**
- **Other**
- **University**
- **SME 11-49**
- **R&D Institution**
- **Big company**
- **SME 50 - 249**

Dissemination

Technology keywords

- **01004017 - Work Hygiene and Safety Management**
- **01004005 - e-Government**
- **11006 - Citizens participation**
- **01004006 - Environment Management Systems**
- **01004001 - Applications for Health**

Market keywords

- **01004002 - Data communication components**
- **02006004 - Data processing, analysis and input services**
- **02006007 - Databases and on-line information services**

Targeted countries

- **World**

Sector groups involved

- **Proximity & Social Economy**
- **Digital**