Hochschule für Technik Stuttgart

International Master Programme Smart City Solutions

S M A R T C I T Y S O L U T I O N S Hochschule für Technik Stuttgart

Completed Master Theses

	AUTHOR	FIRST SUPERVISOR	SECOND/THIRD SUPERVISOR	SEMESTER OF DEFENCE	TITLE
1	Alaa Sndyan	Prof. Ralf Petersen	Carmen Antuna Rozado, M.Sc.	February 2020	The city's role in strengthening the natural ecosystem habitat developing a conceptual framework for urban designer to integrate nature-based solutions
2	Anna-Lena Fischer	Prof. Roland Dieterle	DiplKffr. Katja Halbherr	February 2020	Development of a vision for sustainable industrial factory conversion as contribution to sustainable urban development. Case: Mercedes-Benz AG, Sindelfingen
3	Michelle Joanna Fuentes Cabeza	Prof. Dr. Tobias Popovic	William Pissolatti, M.P.M.	February 2020	How to reduce the energy consumption and carbon footprint in office buildings using the example of Bosch in Schwieberdingen?
4	Susann Konratzki	Prof. Dr. Sabine Rein	Int. Dipl. BW Werner Maier	February 2020	A corporate responsibility analysis toolkit facilitating brand spaces' function as interaction and integration incubators for sustainable development in metropolitan areas
5	Abdelrahman Shaikh Ali	Prof. Dr. Armin Grunwald	Prof. DrIng. Dietrich Schröder	February 2020	Assessing the relationship between temporal change of urbanization and urban vegetation cover and its implication on the vulnerability to urban heat islands for Karlsruhe and Rheinstetten cities
6	Mitchelle Rosales Calderon	DrIng. Nadine Kuhla von Bergmann	DiplIng. Andreas Herrscher	February 2020	Digital visual tools as supporting instruments for collaborative decision-making process in smart city projects: Case study with SWM for "Smart M-Quartier"
7	Sanjana Ravi	DrIng. Nadine Kuhla von Bergmann	Prof. DrIng. Markus Schmidt DiplGeogr. Sascha Behnsen	February 2020	Framework of design consideration for autonomous buses in complex urban systems: Analysis of the challenges for the implementation of autonomous buses using German streets as case study
8	Rhea Clarissa Fernandes	DrIng. Nadine Kuhla von Bergmann	Prof. Dr. Iris Belle	February 2020	Evaluation of EU funded smart city projects to inform funding bodies and participating entities
9	Amruta Jayawant	DrIng. Nadine Kuhla von Bergmann	DrIng. Marius Mohr	February 2020	Active citizen engagement as an asset for conservation and management of urban water bodies: a case study of rejuvenation of water canals in city of Kochi, India

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10	Halimeh Abuayyash	Prof. Dr. Jürgen Breuste	Prof. Roland Dieterle	February 2021	Biophilic smart cities: urban, nature, people. Relations in arid regions
11	Asmita Nandkishor Rawool	Prof. Dr. Tobias Popovic	Ms. Ezgi Gökdemir	June 2021	Analysis of mobility solutions in smart cities (rural areas)
12	Vipul Vinod Sarnot	Prof. Dr. Bastian Schröter	Dr. phil. Dirk Pietruschka	June 2021	Simulation-based parameter study (energetic/economic) for the design of solar thermal energy as a second heat source for an existing regenerative local heating network (wood chip firing) in Weihenbronn in the municipality of Wüstenrot
13	Taha Al-Taie	Prof. Dr. Iris Belle	Mr Jochen Scherer	June 2021	An innovative approach to smart finance of foreign funding for socially, environmentally and economically sustainable infrastructure projects
14	Olga Timofeeva	Prof. Dr. Iris Belle	Dr. Barbara Flügge	June 2021	Mobility drives real estate: What requirements should mobility solutions fulfil in order to be incorporated in real estate development projects?
15	Abeo Trotter	Prof. Roland Dieterle	Mr. Marius Mohr	February 2022	The role of nature-based solutions in addressing the urban drainage challenges in the city of Kochi
16	Madhavi Phatak	Prof. DrIng. Markus Schmidt	Dr. Stefan Carsten	February 2022	Contribution of Shared Autonomous Vehicles (SAVs) in restructuring and transformation of the public streets
17	Helen Dawood	Prof. Dr. Tobias Popovic	Dr. Dilay Kesten Erhart	February 2022	The relevance of digital tools for increasing refurbishment rates in residential buildings in Germany
18	Maroun Aad	Prof. Dr. Julian Petrin	Dr. Bruno Bueno & Janina Willmann MSc	February 2022	Attempt on easing building integrated photovoltaics' software simulation: focus on visualisation and luminance image generation by MorphoColor© case study
19	Achim von Neefe	Prof. Dr. Tobias Popovic	Dr. Azar Shahgholian	February 2022	Smart districts and grid reliability
20	Dhanesh A.D Chathuranga	Prof. Dr. Iris Belle	Prof. Fabienne Hoelzel	June 2022	Social Capital in collaborative decision-making as a tool for creating a smart region in developing countries. With special reference to handicraft industries in Sri Lanka
21	Divya Karthikeyan	Prof. Dr. Tobias Popovic	Dr. Gunnar Gladen	June 2022	Sustainable Municipal Waste Management: Comparing the carbon footprint of ECO CYCLING as an alternate to traditional solid waste disposal practices

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22	Mireille Jean	Prof. DrIng. Christina Simon- Philipp	Prof. habil Ursula Eicker Phd DrIng. Nicole Baron	June 2022	To what extent can the adoption of innovations in residential street design improve the resilience of a neighbourhood of Quebec City?
23	Naim Meftah	Prof. Dr. Iris Belle	Adnan Rao, M.Sc.MBA	June 2022	What challenges does the public sector face when tendering for autonomous buses and what can this look like? An example based on a fictitious small town in a rural area
25	Abdelhameed Mohamed	Prof. Dr. Iris Belle	DI Ghazal Etminan	February 2023	Key context indicators for smart city developments
26	Dimitris Zervas	Prof. Dr. Iris Belle	Prof. DrIng. Markus Schmidt	February 2023	Future MAAS Systems with hydrogen-powered shared vehicles inside smart cities
27	Vikas Rao Aroor Mundadi	Prof. DrIng. Markus Schmidt	Dr. Barbara Flügge	February 2023	Guidelines for last mile connectivity with a focus on micro mobility infrastructure planning model for smart cities
28	Omid Nikkhah	Prof. Dr. Iris Belle	Dr. phil. Sven Schneider DrIng. Julian Petrin	February 2023	Exploring the applicability of machine learning as a supporting instrument in public participation
29	Hirad Narimannejad	Prof. DrIng. Philip Dechow	DiplIng. Cathrin Krumrey	February 2023	Sharing City and Tactical Urbanism: how smart city can enable and promote citizen participation in a more interactive way
30	Enisa Selmanaj	Prof. Dr. Iris Belle	Katharina Aguilar	February 2023	Smart tourism and smart city goals: an exploration/ guideline of the implementation of technologies for experience enhancing and their potential to increase sustainability
31	Jay Chapaneriya	Prof. Dr. Iris Belle	Dr. Hanns Menzel	July 2023	Integral Planning for Smart Residential Waste
32	Khaled Elwan	Prof. Dr. Iris Belle	Prof. DrIng. Heidrun Bögner-Balz	July 2023	Innovative Technologies for Recycling Construction Waste in Road Building for Smart Cities: the German Case
33	Nataly Martinez	Prof. Dr. Iris Belle	DiplIng. Matthias Schaepers	July 2023	Comparison of Implementation vs non-Implementation of Carbon Dioxide Capture Technologies in Cities

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