



















ABOUT THE CAMP

PARTICIPANTS GENDER

Q 51

3 48

The Urban Lab Camp aims to provide its participants with the necessary theoretical and practical know-how that aligns with the foundations of sustainability and modern SMART cities, focusing on the aspects of Urban Development, Energy Engineering and Water Engineering.

The camp involves academic sessions provided by German professors and research assistants from TU Berlin along with experts from international and local NGO's and from private companies to give the participants an insight from the professional life.



13 GOVERNERATES 1154 APPLICANT 99 PARTICIPANT WITH DEGREES FROM

WITH DEGREES FRO

Agricultural - Bio technology
Architecture
Chemistry
Civil Engineering
Economics
Electrical Engineering
Energy Engineering

Environmental Science Law and Humanities Mechanical Engineering Urban Development Urban Planning Water Engineering Other









The research Campus El Gouna acts as a scientific field office of Technische Universität Berlin in Egypt in the heart of the MENA (Middle East and North Africa) region. It provides a fully equipped environment for studying, research and development as well as for cultural and scientific events.

As a place for research and development, the Campus provides a state-of-the-art environment to develop sustainable and applicable technologies to meet the challenges of today and tomorrow. It brings together TU Berlin's experts as well as the future professionals within the lab-like emerging city of El Gouna.

Joint activities with corporate partners such as innovative forms of training and further education as well as research and development play an important role for Campus El Gouna as well. It serves as an interdisciplinary incubator for new approaches to technology and knowledge transfer for strengthening societal awareness and entrepreneurial initiatives.

FRIEDRICH EBERT STIFTUNG

Founded in 1925 as
Germany's first political
foundation, the
Friedrich-Ebert-Stiftung (FES)
is a private, non-profit
organization committed to the
precepts of social democracy.
It bears the name of the first
democratically elected
president of Germany
Friedrich Ebert, preserving his
legacy: the promotion of
freedom, solidarity, and social
justice through the political
process.

Inspired by its general aims to promote democracy and social justice, to support economic and social development, as well as to advocate for human rights and gender equality, the Friedrich-Ebert-Stiftung (FES) started working in Egypt in 1976.

In the field of sustainability, FES` objective is to support sustainable development and promote environmental policies through the exchange of information and experiences on a national and regional level by supporting local partners in realizing projects that promote environmental awareness.

The Urban Lab Camp project with TU Berlin Campus El Gouna with its three tracks will equip students with the necessary skills to tackle not only technical matters but also complex societal issues such as the integration of renewable energies, the impact of climate change as well as informal settlements. The program highlights the relationship between community and environment in attempts to solidify a sustainable approach to human development.













national development challenges.

Innovation tools such as User Centered Design, Games for Social Change, Behavioural Insights, Alternative Finance and the highlight of this event: data. In Egypt, where we have 62% of the population under the age of 29. youth present a tremendous potential and we believe they hold the key to their own empowerment. Which is why we constantly seek out innovative ways to addresses unemployment, a key barrier to youth empowerment.

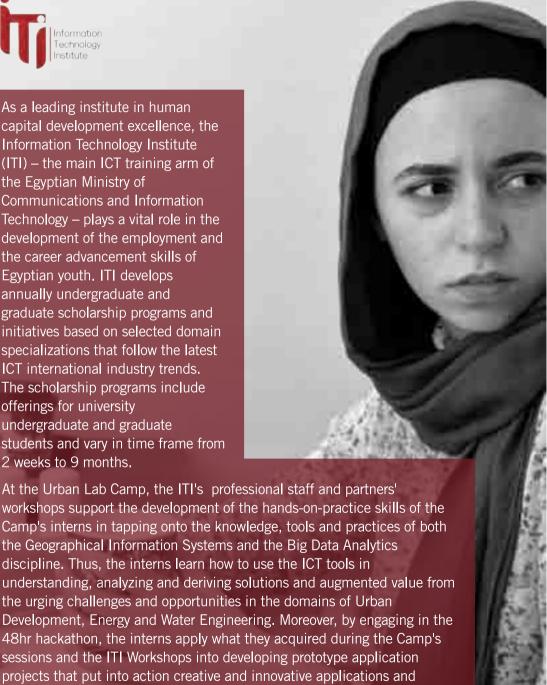
Through the urban lab camp, we support the participation of youth from all over the country, with a special focus on Upper Egypt. With ITI, we focused on building their capacities in the field of data analytics, thereby enhancing their employability and their entrepreneurship potential. We believe that the value of data lies in its use as a driver of economic growth, job creation, entrepreneurship and innovation and contributor to the advancement of the sustainable development goals and in improving the lives of people in this country.



Egypt.

As a leading institute in human capital development excellence, the Information Technology Institute (ITI) – the main ICT training arm of the Egyptian Ministry of Communications and Information Technology – plays a vital role in the development of the employment and the career advancement skills of Egyptian youth, ITI develops annually undergraduate and graduate scholarship programs and initiatives based on selected domain specializations that follow the latest ICT international industry trends. The scholarship programs include offerings for university undergraduate and graduate students and vary in time frame from 2 weeks to 9 months.

solutions that could be further adopted for the Red Sea zone and all across



CAMP ACADEMIC PROFESSORS



AMR **ABDELAAL**

Amr Abdelaal is an urban researcher and practitioner with a strong interest in complexity theory of cities. He completed his master's degree in urban development at the Technische Universitat Berlin. He has a broad spectrum of expertise where he gained his professional experience in urban planning, Geographic Information System, urban upgrading, urban mobility, and community development, His focus is on researching the implications of perceiving cities as complex systems. Recently, he among a group of young professionals founded Madyan, an urban initiative with an aim to contribute to alleviating our communities.

MATTHIAS BARJENBRUCH

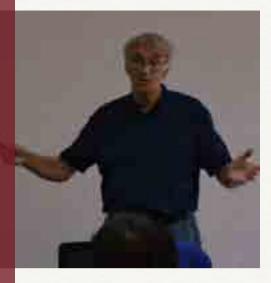
Prof. Dr.-Ing. Matthias Barjenbruch is the Director of the TU Berlin Campus El Gouna since 2016 and head of the Department of Urban Water Management, at the Institute of Civil Engineering at TU Berlin since 2006.

His main research topics are wastewater and sludge treatment. advanced wastewater treatment. water re-use, water supply and water saving and water - energy nexus, Prof. Matthias Barienbruch is member of the board of the German association of water. wastewater and waste (DWA). President of the DWA Section North-East and Chairman of specialized group of DWA: Group 2.8: "Advanced wastewater treatment". Also he is a member of the International Water association (IWA) and the German Association for Drinking Water and Gas (DVGW),



PETER BERTEN

Prof. em. Peter Berten, TU Berlin. 1995 – 2006 Head of the Design and Building Theory Unit at Faculty VI, Technische Universität Berlin. Freelance architect and partnership with ASK-group of architects, urban-planners and engineers in Berlin, mainly engaged with housing as new buildings. rehabilitation and preservation. urban design and urban planning. social service units for children and elderly people, schools and sport facilities and office- and business. buildings. Visiting Professor at CAUP of TongJi University Shanghai. Development work and realization of prototypes for timber-frame constructions including energy-saving concepts. Since 2008 he has been involved with students in architectural survey and design projects in Ladakh.



MICHAEL BOLLKEMPER

Michael Bollkemper is responsible for the technical and analytical support in the department of water engineering. He has a wide range of working experience e.g. environmental office, commercial labs and industry. His main interest is Analytical Chemistry, Michael is organizing the labs. maintaining the lab devices and developing new methods for practical courses and research as well as performing quality control and quality management for the lab.

HASSAN ELMOUELHI

Hassan Elmouelhi, Urban planner, designer and architect, senior researcher, lecturer and project coordinator (RealCityLab project) at Habitat Unit-international urbanism and design, and department of Urban development - TU Berlin, Campus EL-Gouna, Through a DAAD scholarship (2010-2014) he obtained his PhD in Architecture -Habitat unit - Berlin Technical University with a research entitled: Culture and informal urban development- the case of Cairo Ashwa'evat (informal settlements), B.Sc. and M.Sc. Cairo university, former guest lecturer at master program IUSD - Integrated Urbanism and sustainable design- Cairo (2015), he has participated as an expert in several international workshops and seminars about informal urbanism in several countries (India, Tanzania, Ecuador, Tunisia, Egypt and Germany), Guest lecturer at Bauhaus University in Weimar (2014-2016-Summer school: Cultural landscapes and urbanism) Between 2014 and 2016 he was the main coordinator for the DEVEPER research project, leading on the empirical research design and analysis.



SVEN-UWE GEIBEN

Prof. Sven Geissen started his activities in the MENA region more than 20 years ago when he initiated and coordinated a project in the EU-Avicenne initiative. Meanwhile he has successfully completed or applied for many projects with colleagues from Morocco, Algeria, Tunisia, Lebanon, Syria, and Jordan. His research interests are industrial water treatment, management, and reuse.



VOLKMAR HARTJE

Prof. Dr. Volkmar Hartje has been professor for Land Use and Environmental Economics at Technical University Berlin since 1987. He is author of numerous contributions in journals and books and has many years of comprehensive research experience in economic valuation of non-market benefits from nature conservation and environmental protection. Since 1996, various economic valuation methods with respect to different types of ecosystems and different research questions have been applied at his department. Examples encompass the conversion of forest and running waters ecosystems, water-related ecosystem services. ecologically sound flood protection at the river Elbe. alterations of ecosystem services by changes in land use and the implementation of a biodiversity strategy. Volkmar Hartie studied Economics at the University of Cologne and City Planning at Harvard University. He wrote his Ph.D. thesis on institutional-economic questions regarding marine use and did research on international environmental policy at the Science Center Berlin, Moreover, he was involved in the environmental management system of the Kreditanstalt für Wiederaufbau in Franfkurt/M.

AHMED KHALIL

Ahmed Khalil is an urban practitioner and researcher. He acquired his B.Sc. in Electrical Engineering, majoring Computer & Systems from Ain Shams University. He worked as a Software Engineer & Developer before joining the Urban Development master's program in 2013. After graduating he has been working as a Research Associate at Technishce Universität Berlin Campus El Gouna and as a Senior Software Engineer focusing on developing smart solutions and platforms for Mobility & Transportation. His focus in research is Urban Mobility and its relation with the livability and resilience of communities. He is also one of the founders and driving forces of Madvan, Khalil is also the co-founder and project manager of the Urban Lab Camp.





ESLAM MAHDY

Eslam Mahdy is an Urban Planner with more than twelve years of practical experience in integrated design processes, housing projects, strategic and detailed masterplans. Since his graduation from the Faculty of Urban and Regional Planning, Cairo University in 2004. he has been working on various projects in several countries such as Egypt, Saudi Arabia, Qatar, Senegal and Germany. He also has a diploma of Economics and Development from the Institute of National Planning – Cairo (2008) and holds a Double Master's degree of Integrated Urbanism and Sustainable Design from the University of Stuttgart-Germany and Ain Shams University in Cairo-Egypt (2013). He followed this with a fellowship in Climate Engineering at Transsolar Academy focusing on research and projects related to energy efficiency measures in the built environment. In 2016, Eslam joined TU Berlin Campus El Gouna as a lecturer and research associate at the Department of Urban Development.

FARSHAD NASROLLAHI

University, Iran.

Dr. Farshad Nasrollahi received a Doctor of Engineering in the field of Energy and Architecture in 2009 from Berlin Institute of Technology. In the meantime, he has worked as a research assistant at this university for some periods between 2006 and 2008. He received the DAAD Prize 2009 for the outstanding achievements made during his studies. His dissertation received the "Best PhD Dissertation Award in the field of Energy Conservation" from the Iranian National Energy Committee, IFCO and IEEO. Between 2008 and 2013 he has worked as a full-time assistant professor in the Chair of Building Technology and Architectural Design of TU Berlin, The main research filed of Farshad Nasrollahi and his teaching activities at this university focus on building energy simulation and energy-efficient architecture. He has also worked as a teacher at the TU Berlin Campus El Gouna, Egypt, the Isafahn University of Arts and Ilam



MICHAEL ORLOFF

Prof. Michael Orlof is graduated from Minsk Radio-Technical Institute (MRTI) in 1971 and began his work at Chair of Computer Engineering as lecturer-assistant and researcher, In 1978, he received his Candidate in Science (equivalent of PhD) at MRTI in two specialties (Dr. Dr. Sc. techn.) in Sankt-Petersburg Institute of Precision Mechanic and Optics. His interests include design of specialized computers, theory of CAD with methods of artificial intelligence, theory of large system modeling and development, inclusively applying the Theory of Inventive Problem Solving (abbreviation TRIZ – from Russian). He established private research and educational Academy of Modern TRIZ in Berlin. Germany and devoted his activity to TRIZ development and dissemination around the world. He is author for more than 25 textbooks and monographs He is current focused activity is to educate a new generation of engineers and managers to give them knowledge and skills to generate effective creative ideas and solutions in any field of activity. For this purpose he developed special methods of his Modern TRIZ.



DETLEF RIEBOW

After finishing his vocational training as an Industrial Mechanic (machine and plant engineering) and earning his degree in Mechanical Engineering at TU Berlin, Dipl.-Ing. Detlef Riebow started working in different fields of plant engineering (waste water treatment, chemical, industrial and power plants) as Project Engineer, Project Manager, CAD/CAE Admin and Head of Engineering and Design Department. He has been a Research associate in the 'Institut für Energietechnik' at TU Berlin. He then held the position of Deputy head of the nuclear reactor SUR-100 and had been in charge for complete dismantling: radiation safety officer (reactor + radionuclide laboratory) and safety representative. Since 2008, Detlef Riebow is part of the El Gouna Team. He is responsible for the laboratory in the EE-Department.

JÖRG **RUDIGER**

After his studies in Chemical Engineering at University of Karlsruhe focused on Combustion Technology and Thermal Process Engineering Jörg Rüdiger has been working as a development engineer in the sectors of water treatment plant engineering and biomass power plant design for more than 15 years. Having achieved technical implementation of projects on Climate Protection by thermal biomass conversion technologies, he researched simulation and application of closed material cycles under energy efficiency aspects at Brandenburg University of Technology and Beuth University of Applied Sciences, From there, he joined the team at TU Berlin Campus El Gouna in January 2016 in order to accompany the laboratory for Energy Engineering and to continue his research work on integrated renewable energy concepts focusing on the MENA-Region.



NADA **SAMIR**

Nada is an Architect and Urban developer. She started focusing on environmental solutions in the Egyptian context, based on her inspiration from Hassan Fathy's work. She obtained her master's degree at the Technical university of Berlin Campus El-Gouna, where she extended her research on cooperative-participatory development in socially deprived areas. Nowadays, with some bearing wall architectural renovations on the working schedule, Nada with other young developers and researchers founded a non-profit urban development firm "Madyan".



RUDOLF **SCHÄFER**

Prof. Dr. Rudolf Schäfer is the Founding Director of Campus El Gouna, Study Dean Urban Development. He is also the study Dean of the Masters program of Real Estate at TU Berlin. He also holds the position of President of the Conference of German Deans and Head of the department of Architecture, Regional Planning and Landscape Planning (DARL). He studied political science and law at the FU Berlin (Civil & Structural) Engineering) at TU Berlin. In 1982, he was appointed professor of administrative law at FRSVR Berlin for six years. Since 1988, he has been working at the University of Applied Sciences, Berlin, as a university professor of construction law and construction management. From 1989 to 2010, Prof. Schäfer assumed the function of Dean of the Faculty of Architecture (Faculty of Planing Building Environment). In addition to the extensive teaching activities, there are numerous publications in the fields of construction and planning law, urban renewal, urban redevelopment, and urban development

DAVID **SCHRÖDER**

David Schröder is a research assistant at the department of Energy Systems at the Technische Universtät Berlin. His research is focused on the establishment of new players in the energy market and dynamic energy system modelling. Before joining the TU Berlin David worked as a technical consultant in financing renewable energy and energy efficiency projects. David holds a master's degree in Renewable Energy Systems and studied at the TU Berlin and the Royal Institute of Technology KTH in Stockholm





SAHAR **SODOUDI**

Sahar Sodoudi is professor of Urban Climatology and head of the working group "Urban Climate and Health" at Freie Universität Berlin. She studied Physics and has her PhD in meteorology. She has many years of experience in climate and urban climate modelling and is working on the interaction between climate change and urban heat island and its impact on outdoor micro climate, Building's energy demand and human thermal comfort. Since 2013, she is cooperating with 18 Egyptian Universities in the filed of adapting sustainable urban development on the local climate change via establishment of "Urban Climate Labs" in Egyptian Universities. Through her lectures in Urban Lab Camp, she tried to sensitize Egyptian students to the impacts of climate change in the cities and adaptation options.

UWE TRÖGER

Prof. Tröger's experience in the MENA-region is widespread. This is not only reflected in his research fields like sewage farms in Cairo. marine water intrusion in the delta of the River Nile, or water supply of Damascus. Prof. Tröger has also participated in building up the Higher Institute for Water Management in Syria, as well as the Zentralinstitut El Gouna of the TU Berlin being responsible for the academic curricula. Within the latter he is Dean of the Water Engineering Department.



NIKOLAOS TZOUPANOS

Dr. Tzoupanos, Laboratory Head at the Department of Water Engineering is responsible for the Water Chemistry labs as well as for several pilot-scale test stands. He is involved in several modules of the master's degree program, such as Water Chemistry and Water Supply/ Wastewater Treatment II as well as in the research activities of the Department. His research interests cover water and wastewater of any origin (i.e. municipal or industrial) treatment, treated water reuse and sustainable water resources management: further on, the development of alternative and/or innovative treatment techniques aimed to the removal of specific target pollutants and environmental pollution control, prevention and risk assessment.

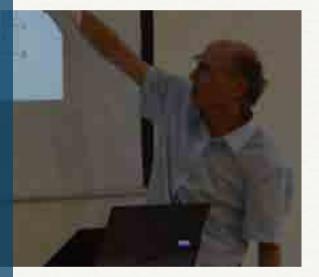


DANIEL WOLF

Dr. Wolf is a researcher at Heliocentris Energy Solutions AG, a technology leader in the fields of distributed power solutions and energy efficiency services. Dr. Wolf conducted his PhD at the chair of thermodynamics of Ruhr-University Bochum. His research focus is on integration of renewable energy, particularly compressed air energy storage. As well the design of energy market mechanisms caught his attention.

FELIX **ZIEGLER**

Prof. Felix Ziegler is the Dean of the Faculty for Process Science of TU Berlin, Apart from his responsibility for the faculties undergraduate program and the graduate program "Renewable Energy Systems",. He studied mechanical engineering in Technische Universität München, and received his Diploma in 1981. In TU München Prof. Ziegler also completed his Ph.D. in 1991 and a Doctor Habilitatus Degree in 1998. His research field is Evaporation, Absorption and Desorption: Absorption Chillers, Heat and Mass Transfer; Heat Pumps and Transformers: Sorption Power and Storage Cycles; Closed and Open Sorption Cooling Systems; Steam Jet Processes; Energy Systems Engineering.



CAMP GUEST LECTURERS



YASEEN **ABDELGHAFFAR**

Managing Director SolarizEgypt

Yaseen holds a BSc in Chemistry from The American University in Cairo. He held managerial and technical roles in local and international companies including Edita Food Industries and ExxonMobil Egypt. His exposure to successfully operating companies and his experience within the energy sector has led to founding SolarizEgypt in 2013, where he currently holds the position of Managing Director.

AI AA **ANWAR**

Senior Development Manager Al-Futtaim Group Real Estate

Alaa Anwar brings with him 17 years of experience in real estate sector, he joined Al-Futtaim Group Real Estate (AFGRE) – Egypt in 2007 as "Senior Development Manager" for Development of Cairo Festival City Project within the hospitality, residential, commercial and general infrastructure portfolios.

Alaa holds B.SC of Architectural Engineering from the Faculty of Fine Arts – Helwan University, he also holds a Master's Degree (MBA) in Project Management from the Victoria University of Switzerland, he also holds a Project Management Diploma from the American University in Cairo, and attended the Real Estate Executive Development Program provided by the American University in Cairo.



NOOR A. NOOR

Executive Coordinator Nature Conservation Egypt

Noor A. Noor is an environmentalist working in the field of biodiversity conservation and environmental education. Noor manages Nature Conservation Egypt (NCE), focusing on bridging conservation with economic development through promoting nature-friendly energy, responsible tourism and hunting management. Noor also works with Dayma Journeys in the field of educational environmental tourism, using biomimicry as a foundation for innovative design.

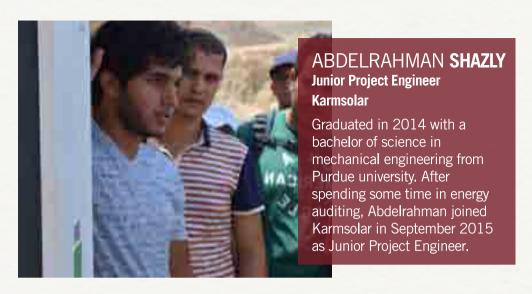


YOUSSEF SARHAN

Technical Sales Engineer SolarizEgypt

Youssef holds a BSc in Mechatronics, Robotics and **Automation Engineering** from the German University in Cairo. He kicked off his career as a supply chain capability specialist at Juhayna and then moved to the Oil & Gas sector as a Field Engineer at PetroServices Drilling Fluids. His wide field experience made him a perfect match for SolarizEgypt's needs as he currently holds the position of Technical Sales Engineer.





AHMED ZAAZAA

Researcher and Urban Designer,
Co- founder of 10 Tooba and Madd Platform

Architect, Co-founder- Madd Platform

An architect, participatory planner and urban researcher and has over seven years' experience in urban mapping and participatory planning.

Ahmed worked with the community of Maspero, leading the design of the first participatory upgrade project to be implemented by the Ministry of Urban Renewal and Informal Settlements. Ahmed has also worked with the communities of Mit 'Okba and al-Kom al-Ahmar on repaving streets and redesigning public spaces.

Ahmed is also co-founder of Madd Platform, as well as the Built Environment Collective (MEGAWRA).





AHMED **ZAHRAN**

CEO

Karmsolar

Holds a MSc. in Economics from the University of London, a BA. in Business Administration & Finance from the American University in Cairo and a diploma from The European College of Liberal Arts in Berlin in Philosophy & Literature. He has 10 years of experience in renewable energy and carbon trading working at Shell in the UK and Tunisia, and working in Egyptian Kuwaiti Holding in Egypt. Ahmed is responsible for guiding, coordinating and overseeing the commercial and technical growth strategies of the company.



CAMP PARTICIPANTS URBAN DEVELOPMENT

- 1. Reem Abbas
- 2. Mai Abdelkader
- 3. Hala Abdelaziz
- 4. Hoda Abdelmawla
- 5. Youstina Atef
- 6. Hellen Aziz
- 7. Mai Badr
- 8. Ahmed Bedair
- 9. Islam El Banna
- 10. Salma El Rouby

- 11. Sara Elamawy
- 12. Waleed Elshatlawy
- 13. May Elshobaky
- 14. Mennatallah Farghaly
- 15. Sarah Fathi
- 16. Marwan Fouad
- 17. Mona Gaber
- 18. Maram Gaber
- 19. Yara Galal



- 20. Salma Hasb El Naby
- 21. Faten Hatem
- 22. Dina Ibrahim
- 23. Yaseen Jabr
- 24. Youssef Kassem
- 25. Nermeen Kenawy
- 26. Marawan Magdy
- 27, Suzan Mahran
- 28. Dina Mamdouh
- 29. Mahmoud Mohamed
- 30. Richard Moines

- 31. Asmaa Nashaat
- 32. Marwa Orfie
- 33. Omar Ossman
- 34. Mohamed Raslan
- 35. Mohamed Sabry
- 36. Amr Shalaan
- 37. Barihan Soliman
- 38. Shahenda Yousry
- 39. Sara Zagholul



- 1. Ahlam Abdallah
- 2. Nouran Abdelhady
- 3. Ahmed Abdelmegeed
- 4. Amr Abdelwahab
- 5. Nesma Abo Shanab
- 6. Nancy Ahmed
- 7. Sara Ahmed
- 8. Yasmine Allam
- 9. Abdelrahman Amer
- 10. Andrew Awad

- 11. Amal Badawy
- 12. Mahmoud El Fahl
- 13. Jillan El Rafey
- 14. Essam Elnaggar
- 15. Amr Essam
- 16. Marwan Essam
- 17. Karim Fahmy
- 18. Abdurahman Farouk
- 19. Mariam Hafez



- 20. Mariam Hamada
- 21. Ahmed Hanafi
- 22. Doaa Ismail
- 23. Mohamed Ismail
- 24. Mohab Maher
- 25. Hazem Mohamed
- 26. Omar Mohamed
- 27. Ahmed Mohammed
- 28. Shimaa Muhammad
- 29. Eslam Nassar
- 30. Mohammad Raafat

- 31. Mariam Sadek
- 32. Mohamed Said
- 33. Abdallah Shehata
- 34. Alaa El Din Siam
- 35. Sondos Yahia
- 36. Ahmed Yassin



- 3. Mostafa Alamir
- 4. Anas Azzam
- 5. Moustafa El Shourbagy
- 6. Zeinab El Ghoul
- 7. Reham El Sayad
- 8. Merna Emara
- 9. Amir Essam 10. Rana Fahmy

- 13. Ahmed Hassan
- 14. Eman Hotaiba
- 15. Sara Ismael
- 16. Adel Khaled
- 17. Mohab Khalil
- 18. Mariam Montaser
- 19. Ahmed Raslan
- 20. Omnia Salem
- 21. Yousry Youssef









Technische Universität Berlin Campus El Gouna Mohamed Ibrahim Kamel St. 84513 El Gouna

Egypt

Call: +20 (0) 65 3561 400

E-mail: info@urbanlabcamp.com















