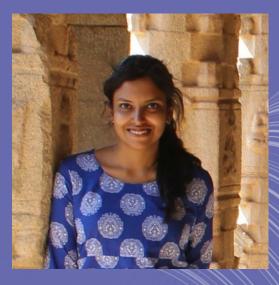Ms. Komal Shah is an entrepreneur-in-residence at Society for Innovation and Development, Indian Institute of Science (IISc), Bangalore. After completing her graduate studies in the Master of Design (M. Des.) program at the Centre for Product Design and Manufacturing, she joined UTSAAH Lab, IISc to work on an EPSRC funded project on the design and development of a Distributed Intelligent Ultrasound Imaging System for Secure in-community Diagnostics, in collaboration with multiple institutes including Cranfield University, UK.

She has co-authored multiple peer-reviewed research publications and is currently leading the development of a system for adaptive stimulation treatment of urinary incontinence. This work is supported under the NIDHI Prayas program of NSTEDB, DST, New Delhi, PMU-SINE IIT Bombay, Mumbai, and IKP Eden, Bangalore. Her current research interests are translational in nature with a strong focus on healthcare for women.

Dr. Manish Arora is currently an Assistant Professor at the Centre for Product Design and Manufacturing (CPDM), Indian Institute for Science (IISc), Bangalore. His current research interests include design-driven medical device development for resource-constrained settings, open and collaborative design, biomedical ultrasound, and multi material additive manufacturing.

Dr. Arora is a chemical engineer by training (B. Tech., IIT-Delhi, 2002) and has completed his Ph.D. in Applied Physics from the University of Twente, the Netherlands (2006). Subsequently, he held the position of Department Lecturer (2008-2010) at the University of Oxford, UK, Lead Scientist at General Electric Global Research and a Senior Researcher at Nanyang Technological University, Singapore. Dr. Arora has co-authored over 90 research publications and is a co-inventor on over 10 patents.

Meraki: An Integrated System for Adaptive Stimulation Treatment of Urinary Incontinence in Women

W2W COMPETITION AWARD WINNERS

IEEE Women in Engineering
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FIGHTING FOR A FUTURE FREE OF VIOLENCE
Exploiting Surveillance Videos for Real-time Detection of *"Signal for Help"*

Sarah Azimi

Sarah Azimi received her Ph.D. Degree in computer and control engineering from Politecnico di Torino in 2019. Currently, she is an Assistant Professor within the CAD & Reliability Group of Politecnico di Torino. She has authored more than 50 papers and she received several awards for her research such as the IEEE TTTC's McCluskey Best Doctoral Thesis Award. Her research interests include reconfigurable computing, computer-aided design algorithms, and fault tolerance architectures.

AR Edu
A mobile application that uses Augmented Reality Technology to project 3D models of learning materials

Orina Dorothy

An Extended Reality Developer and Software Engineer enthusiastic about tapping the potential of Augmented Reality to revolutionize every aspect of society – from education to politics, business and social relations. Skilled in 2D and 3D game design, scripting and development and UI/UX design.
LinkedIn profile:
https://www.linkedin.com/in/orina-dorothy-71a039196/

Nancy Maina

A vibrant innovator skilled in Robot Automation and Programming, Machine Learning and Artificial Intelligence with the aim of automating tasks and advancing systems capabilities. Also motivated in supporting women in technology to positively impact their communities.
LinkedIn profile:
https://www.linkedin.com/in/nancy-maina-083594182/

DEVELOPMENT OF A MOBILE APPLICATION FOR MENSTRUAL HEALTH EDUCATION OF PRIMARY SCHOOL STUDENTS IN KAKUMA AND KALOBEYEI REFUGEE CAMPS.

Stacy Awinja Kifworo

I'm 23years old and from Nairobi, Kenya. I recently completed my undergraduate studies in Biomedical Engineering at Kenyatta University and am awaiting my graduation in July, 2022. I am passionate about the advancement of the Biomedical Engineering profession in Kenya, being a pioneer executive committee member of Engineering in Medicine and Biology Society (EMBS) Kenyatta University student branch, the first of its kind in East and Central Africa

Peres Daphny Danga

I am currently a fourth year undergraduate student pursuing a Bachelor's degree in Electrical and Electronics Engineering at Kenyatta University. My passion, which is to see more ladies and young girls pursue careers in STEM and rise to become iconic leaders in society, has seen me actively take part in volunteering roles in societies in IEEE, to enable me to be a light and a role model to many.

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W2W Competition Projects

Project name	Field	Name Proponent (s)	Country
Hwatcher	W-medicine, mental health aid, and security for women	Mariana Alejandra Moreno Mogoyán, Angélica Martínez Juárez	Mexico
AR Edu	Education	Nancy Maina, Orina Dorothy	Kenya
Application of GIS platform in monitoring borehole water in Kenya	Sustainable environment solutions in rural and urban areas	Claire N Muhungi	Kenya
The Ultimate Tracker	Child, elderly care, universal health: Universal health	Deepali	India
e-guru	Smart childcare and education	W.Dinithi Maduwanthi Fernando	Sri Lanka
Panchasutri for Health	Child, elderly care, universal health	Dr. Lenina SVB	India
Autism is not an Illness	Child, elderly care, universal health	ISET BIZERTE STUDENT BRANCH Wissem Mokni	Tunisia
Design and Experimentation of a Low Cost Full Arm Exertion Gauntlet for Lymphedema	Child, elderly care, universal health	Lara J, Ili Sandhya, Nikita B Jalihal, Shilpa D P	India
Dhwani: A holistic rehabilitation solution for children with hearing impairment	Child, elderly care, universal health	Kavyashree Venkatesh,	India
Kenya-Cares Sanitary Pads	Sustainable environment solutions in rural and urban areas	Valery Chebet Mercy Ngulat, Allan Koech,	Kenya
Meraki: An Integrated System for Adaptive Stimulation Treatment of Urinary Incontinence in Women	Universal Health	Komal Shah, Dr. Manish Arora	India
Forest Fire Detection using Image Processing and Computer Vision	Sustainable environment solutions in rural and urban areas	Madavaram Laya,	India
A Solar-Powered Smart Automatic Irrigation and Storage Systems	Sustainable environment solutions in rural and urban areas	Mistura Muibi-Tijani,	Nigeria
RF Energy Harvesting and Wireless Power Transfer: Sustainable Energy Solutions for Emerging IoT Technologies	Sustainable environment solutions in rural and urban areas	Dr. Negin Shariati, Prof. Dominique Schreurs,	Australia & Belgium
BIODEGRADABLE ECO FRIENDLY COW DUNG POTS,A SUBSTITUTE TOPOLYBAGS	sustainable environment solutions and safe living	NIDA MEHAR C T; Devika Muralidharan	India
Pawa	Education	Andrea Jurado Narvaez, Eng	Ecuador
Helping irrigation: Reducing graund water salinity technology for overcoming food shortage	Agricultural Engineering; SDG for global food shortage; Environmental sustainability	Qudsia Nawaz; Sadia Nawaz; Amna Niazi	Pakistan & Australia
Women's Iron Deficiency Anaemia Detection using Deep Learning (WIDAD)	W-medicine, mental health aid, and security for women	Rahatara Ferdousi, Dr. Fedwa Laamarti,	Canada
Using Ground water salinity Technology to overcome food shortage by helping irrigation in Salinity affected areas	Agricultural Engineering; SDG for global food shortage; Environmental sustainability	Sadia Nawaz; Qudsia Nawaz; Amna Niazi	
The Ultimate Tracker	Sustainable environment solutions and safe living	Irene Samy Fahim	Egypt
Smart Instant Incineration Sanitary Pad Bin (SIISPB)	Sustainable environment solutions in rural and urban areas	Mercylyne Jepleting	Kenya
Concentrated solar thermal power generation	Sustainable environment solutions in rural and urban areas	Sofia Lara Antonelli	Argentina
ASSISTIVE DEVICE FOR FREEZING OFGAIT SYMPTOMS IN PARKINSON PATIENTS	Elderly communication and senior safe living	Sofia Lara Antonelli	
DEVELOPMENT OF A MOBILE APPLICATION FOR MENSTRUAL HEALTH EDUCATION OF PRIMARY SCHOOL STUDENTS IN KAKUMA AND KALOBEYEI REFUGEE CAMPS. (DMAMHEPSSKKRC)	Smart Childcare and Education	Stacy Awinja Kifworo, Peres Daphny Danga	Kenya
Using Thermal Imaging for Crop protection from wildlife (UTIC)	Sustainable environment solutions in rural and urban areas	Tasbiha Zaman, M. Khizer butt, Muhammad Taib Khan, Syed Saad	Pakistan
Ball Microscope for viewing 4D developing amphibian embryos)	Medicine	Susan J. Crawford-Young;	Canada
Creating Educational Environment for Primary Children through AI	Smart childcare and education	Names: Muna Darweesh, Basma Samour, and Sara Suleymanova;	Dubai
Data structures and Algorithms through Minigames	Smart Childcare and Education	Agathi-Christina Kari, Chara Tsirka, Ioannis Vasileiou;	Greece
Smart Crop Protection System [SCPS]	Sustainable environment solutions in rural and urban areas	Ramalatha Marimuthu, Inderpreet Kaur,	India
Stay Calm, Avoid Pregnancy Complications [SCAPC]	W-medicine, mental health aid and security for women	Ramalatha Marimuthu, Inderpreet Kaur	India
A Digital Twin for Female Inclusivity in the Power Sector (DTFIPS)	Sustainable environment solutions in rural and urban areas	Rayah Zahid Awan, Zoya Gul, Bilal Nadeem, Saadunai	Pakistan
AUTONOMOUS DISASTER AVERSION SYSTEM	Sustainable environment solutions and safe living	Saniya Mazhar	Pakistan
Fighting for a Future Free from Violence Exploiting Surveillance Videos for Real-time Detection of "Signal for Help"	Women's health ans security for women	Sarah Azimi	Italy