

WORKING TOGETHER TO BRIDGE THE GENDER GAP IN STEM

African Girls Can Code Initiative
Rwanda (**AGCCI**)



African Union

SIEMENS



UN WOMEN

Message from the UN Women Country Representative

Dear Partners and Supporters,

It is with great pride that I reflect on the journey of the African Girls Can Code Initiative (AGCCI)—a transformative programme that has empowered young girls across the continent, including here in Rwanda, through digital education. With your generous support, we have not only bridged the gender digital divide, but have also provided these young women with the tools they need to excel in ICT and STEM fields.

The power of empowering young girls through ICT cannot be overstated. From coding camps to hands-on experience in robotics and programming, AGCCI has equipped young women with essential skills, opening doors to future careers in technology. This initiative is not only closing the gender gap, but also sparking innovation and entrepreneurial spirit among these young leaders.

The impact is evident in the stories of our alumni many of whom have gone on to become software developers, mentors, and community leaders. Their success is a testament to the importance of investing in young women and girls, and the potential we unlock when they are given the opportunity to pursue their dreams.

We are deeply grateful to our donors, including Siemens, the Government of Belgium, Government of Germany and all our partners, whose unwavering support has been instrumental in making this initiative a reality. Your contributions have helped inspire a new generation of women in STEM and will continue to shape the future of Africa's digital landscape.



I would also like to extend my heartfelt thanks to all our partners, including the African Union, the Ministry of Education, the Ministry of ICT, and the Ministry of Gender and Family Promotion in Rwanda for their collaborative efforts in ensuring the success of this programme. Together, we are paving the way for a brighter and more inclusive future.

Thank you for your continued dedication to empowering young girls through ICT.

Warm regards,

Jennet Kem
UN Women Country Representative

Message from Communications Analyst and AGCCI Support Lead, Pearl Karungi

The African Girls Can Code Initiative (AGCCI) has been instrumental in empowering young girls, including Lucide Pascale, to pursue opportunities they once believed were beyond reach.

Since its inception in 2018, AGCCI has trained over 600 girls from 32 African countries through national and regional coding camps. In Rwanda alone, two boot camps have equipped 125 girls with coding and programming skills, which are crucial as the world moves toward a future dominated by technology and innovation. Participants are not only becoming proficient in technology, but also developing leadership, teamwork, and problem-solving abilities—skills that will serve them both professionally and personally.

Lucide’s journey exemplifies the transformative power of these initiatives, which provide girls with the essential skills, confidence, and platforms needed to thrive in a tech-driven world. Her success has inspired countless other young women, not just in Rwanda, but across Africa.

This project aligns with our Women Economic Empowerment thematic area, which aims to ensure that women and girls achieve income security, decent work, and economic autonomy. A key focus is on promoting job creation and wealth through skills development.

The Siemens-supported EmpowerHER initiative has also had a significant impact, providing mentorship programs that connect girls with global mentors. This mentorship broadens their horizons and offers valuable guidance as they continue their journeys in STEM fields.

While these initiatives have been crucial in narrowing the digital gender divide and empowering young women to take leadership roles in the tech industry, challenges such as limited resources and barriers to accessing technology still persist, particularly for girls from disadvantaged backgrounds.



Continued support and collaboration from stakeholders are essential to ensuring the scalability and sustainability of these impactful programs.

Through AGCCI, we are nurturing a new generation of female technology leaders who will drive Africa’s digital future. Although it is too early to measure concrete economic outcomes, early indicators—such as increased confidence, strong mentorship connections, and enhanced educational aspirations—show positive signs of the initiative’s success. The impact is already visible, with girls from the first cohort pursuing bachelor’s degrees in STEM disciplines across the globe, including **computer and software engineering, computer science, medicine, pharmacy, and data analytics.**

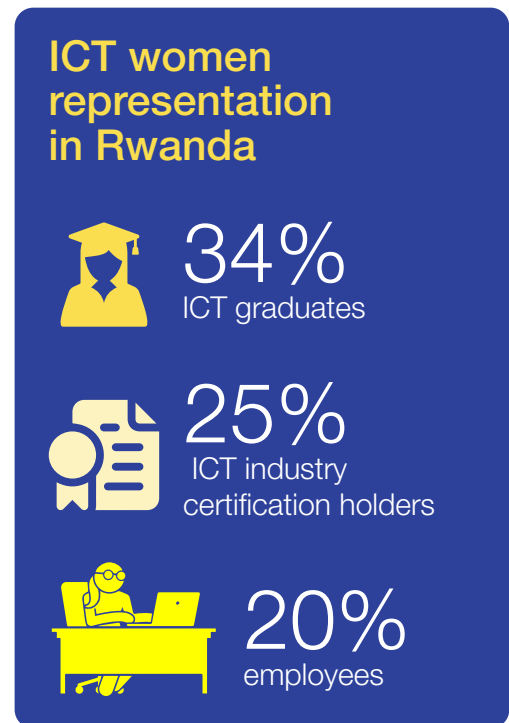
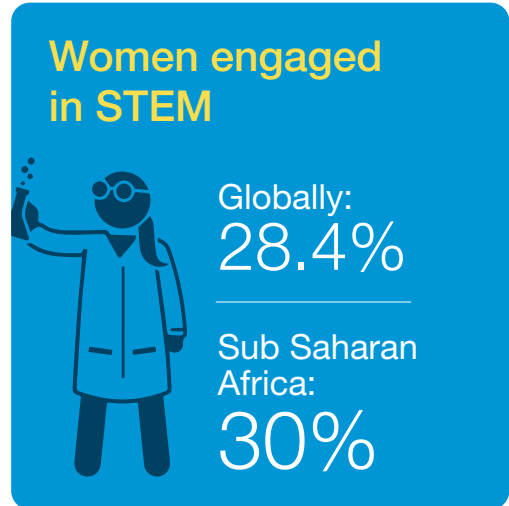
Background

Across the African continent, youths comprise nearly 60% of the population. This youth bulge makes the case for prioritizing the training of youth in ICT. Education in ICT and Coding means to empower them but also the key to unlocking Africa's development potential across sectors.

UNESCO's "The Gender Gap in Science" report cites that globally, only 28.4% of people engaged in STEM careers are women and in Sub Saharan Africa only an average of 30% are women. If young girls and women do not have the training and access to ICT they will be left behind. Teaching girls to code is needed to close the gender gap in the tech world, and the overall gender digital divide.

In Rwanda, this is of utmost importance as statistics continue to show a weaker labour force participation rate for women that stands at 48% compared to 65% for men and unemployment rates of 20 % for women versus 15% for men. With regards to ICT women represent only 34% of ICT graduates, 25% of ICT industry certification holders, and 20% of employees in the ICT sector.

The Government of Rwanda is committed to gender equality across all aspects of Rwandan life. Girls' education is a central component of strategies to ensure that there is inclusive basic education for all, and beyond basic schooling to ensure that girls are appropriately skilled to contribute positively to economic and social development of the country. The Rwanda Education Sector Strategic Plan (ESSP) and the National Girls Education Policy emphasize the commitment of the Government of Rwanda to ensuring equal access to quality education for girls and boys at all levels.



About the African Girls Can Code Initiative (AGCCI)

The aim is to train and empower a minimum of **2000 girls** aged 17 to 25, across Africa...

The African Girls' Code Initiative (AGCCI), launched by UN Women, the African Union Commission (AUC), and the International Telecommunication Union (ITU), aims to bridge the gender digital gap in Africa. Supported by the AUC's Department of Health, Humanitarian Affairs and Social Development (HHSD), the Directorate of Women, Gender, and Youth (WGYD), and the Department of Education, Science, Technology and Innovation (ESTI), AGCCI is committed to training and empowering at least 2,000 girls aged 17 to 25 to become skilled computer programmers and innovators.

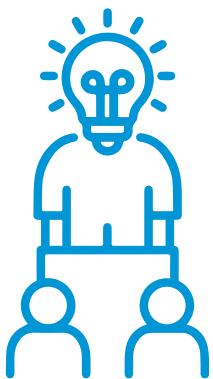
The initiative focuses on two main strategies: hosting coding and robotics camps and integrating ICT, coding, and gender into national education curricula. The inaugural phase (2018-2019) was a success, and the second phase, launched in April 2022 with support from UNESCO, ECA, and the Government of Belgium, included a Training of Trainers (TOT) program in Dar es Salaam, equipping representatives from 11 priority countries, including Rwanda.

On July 19, 2023, UN Women, in partnership with Rwanda's Ministry of Education, Ministry of Gender and Family Promotion and the Ministry of ICT, officially launched the Rwanda Chapter of AGCCI, where 50 high-achieving young women participated in the coding camp, and 75 girls took part in the second bootcamp in March 2024. Additionally, all participants received laptops to support their STEM education and were enrolled in the Siemens EmpowerHer programme.





The rationale for the Coding Camp



trainees receive mentorship after the coding camps for **6 months**

National coding camps are implemented with the overarching goal of equipping young girls with different coding skills and sparking their interest in ICT. Upon completion of the National coding camp, each girl is equipped with enough knowledge about digital literacy, coding skills and how to access online and other resources to further goals to create innovative solutions around societal challenges.

Such knowledge and skills will enhance their career opportunities and inspire them to be entrepreneurs, hence creating jobs for themselves and others. Trained young girls will be equipped with knowledge and skills which will enable them to become programmers, creators and designers, placing them on track to take up careers in ICT, education and coding.

With financial support from Siemens and Belgium, the African Girls Can Code Initiative is launched in Kenya, Senegal, South Africa, and Uganda, Burundi, Mali, Mozambique, Niger and Tanzania to host

The trainees receive mentorship after the coding camps for 6 months and an additional training that will enable them to receive a Mendix certification, a leading low code learning platform that enhances their qualification as coders.

Our Flourishing Alumni: Class of 2023



Trained 50 girls between 17-27 years



Ihirwe Umwari Marie Merci

- University of Rwanda
- Pharmacy



Niyobitangaza Flavia

- University of Rwanda
- General medicine and surgery



Diane Tuyisingize

- University of Rwanda
- Bed With Honours In Computer Sc. & Math. (MCsE)



Ishimwe Fidelia

- University of Rwanda
- Studies: Bachelor of Anaesthesia



Ishimwe Pacifique

- Adventist school of medicine of East Central Africa
- Medicine



Abamenyimana Miriam

- University of Rwanda branch of Huye
- General Nursing



Uwera Alice

- UR huye campus
- General Medicine



Ukunzwenase Benitha

- University of Rwanda
- Studies: Electronics & telecommunication engineering



Fortunee Shimwamubyeyi

- University of Rwanda
- Studies: computer engineering



Niragire Jeannine

- University of Rwanda
- Studies: Medicine and surgery



Denyse Muhoza

- University of Rwanda
- Studies: Bachelor's in pharmacy



Nice Teta Hirwa

- Westmont College (USA)
- Computer Science & Data Analytics



Ingabire Deborah

- Adventist University of Central Africa
- Software engineering



Nadine Akimana

- Massachusetts Institute of Technology
- Computer science and Maths



Ufitinema Kayinamura Lorraine

- Adventist university of central Africa
- Software engineering



Muhawenimana Florentine

- University of Rwanda ,Rukara Campus
- Biology and chemistry with education



Gwiza Carmella

- African Leadership University (ALU)
- BEL



Niyomufasha Aimee Sacrifice

- Escuela Latino America de Medicina(ELAM) University, Cuba
- Medicine



Divine Kirezi

- International college of Manitoba
- Undecided



Isingizwe Mpuhwe Lucide Pascale

- University of Rwanda, CST
- Bachelor's Degree in Computer Engineering & Data Analytics



Natacha Sangwa Bizimungu Mugire

- University of applied Sciences Coburg
- Computer Science



Claudine Mujawimana

- University of Rwanda, Huye campus
- Business Information Technology



Illuminée Mutuyimana

- University of People
- computer science



Niwemubyeyi Carine Cwe Sandra
🎓 University of Rwanda
🎓 Medicine and Surgery (MBBS)



Mugisha Manzi Mireille
🎓 University of Rwanda in Huye Campus
🎓 Pharmacy department



Ikuzwe Ndahayo Gloria
🎓 University of Rwanda
🎓 Bachelor of pharmacy



Uwase Noella Marie Chartine
🎓 African Leadership University
🎓 Bachelor's of Software Engineering



Umuhaza marie Claire
🎓 College of Education / Rukara campus
🎓 Mathematics and Economics with Education



Orly Noella Mutabazi
🎓 Algonquin College
🎓 Computer engineering Technology



Kesia Dusengimana
🎓 University of Rwanda Huye campus
🎓 Bachelor degree with honors in nursing



Nkurunziza Umutoni Diane
🎓 Silesia University of Technology (Poland)
🎓 Aerospace Engineering



Umutoni Kellia



Iradukunda Florence
🎓 Ines ruhengeri University
🎓 Statistics applied to economy



Mushimiyimana Jeanine
🎓 university of Rwanda
🎓 Economics



Gaudence Muragijimana
🎓 UR ce Rukara campus
🎓 Mathematics and Geography with education (MGE)



Rahab Dushimimana
🎓 University of Rwanda
🎓 Bachelor of pharmacy



Niyigena Sani Oda
🎓 University of Rwanda
🎓 Clinical pharmacy and pharmacy practices



Uwikunda Janvier
🎓 Not enrolled in a higher education institution (University)



Kayumba Teta Aela Greta
🎓 University of Rwanda
🎓 Information Systems



Umuhaza Samila



Ishimwe Kelly



Uwayo Anne Marie
🎓 University of Rwanda
🎓 computer science



Irida Agatesi Ninette
🎓 African Leadership University
🎓 Software engineering



Joselyne Uwamahoro
🎓 University of Rwanda
🎓 Bachelor of pharmacy



Pendo Vestine
🎓 African Leadership University (ALU)
🎓 Software engineering



Ineza joy alic
🎓 University of Mohammed IV polytechnic
🎓 Architecture



Iradukunda Jacqueline
🎓 University of Rwanda
🎓 Bachelor of pharmacy



Nduwawe Juventine
🎓 University of Rwanda
🎓 Bachelor of pharmacy



Umutoni Jolie



Kayitesi Fabiola

Growing Our Alumni Community Class of 2024



Trained
75 girls between
11-15 years



Beyond the Coding Bootcamps

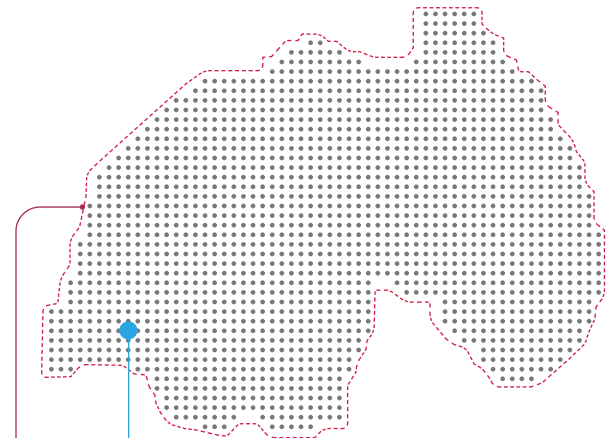
In the rural Rwandan village where **Chantal Niyonkuru** grew up, access to digital technology was basically non-existent. But when she was selected to attend one of the country's top high schools, Chantal took to computer science right away. After acing her exams, she told her mother she wanted to pursue a career in programming. Marie Chantal Niyonkuru, is the inaugural regional AGCCI alumni and a software developer. She has coached more than 100 software development university graduates from Rwanda and has given motivational speeches to more than five girls' high schools in her home district. In addition, she opened an ICT club and teaches children basic computer skills in Rusizi district.



Marie Chantal Niyonkuru



AGCCI reinforced my passion for ICT and my deep conviction that girls can pursue this area and challenge existing stereotypes. The program was reaffirming, after the bootcamp in 2019, I decided to tackle the STEM field head on and became a software developer.”



Opened an ICT club and teaches children basic computer skills in Rusizi district



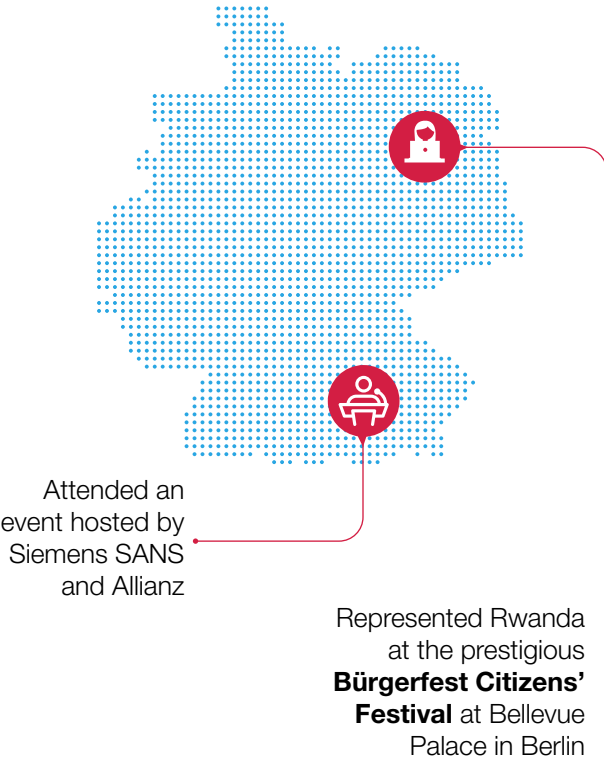
Inaugural regional AGCCI alumni



Coached more than 100 software development university graduates from Rwanda



On 12 September 2024, **Lucide** was chosen to represent Rwanda at the prestigious **Bürgerfest Citizens' Festival** at Bellevue Palace in Berlin, hosted by the Federal President of Germany, Frank-Walter Steinmeier, and Elke Büdenbender. This opportunity allowed her to showcase her skills and represent Africa's growing tech talent as an AGCCI and Siemens EmpowerHER ambassador, together with other five AGCCI alumni from South Africa, Kenya, and Senegal. Lucide and her fellow AGCCI alumni attended an event hosted by Siemens SANS and Allianz, where she delivered a speech to a distinguished audience in the tech industry. Her words, born from her personal experience and growth through the Cyber Talent Academy, resonated with the audience, adding a personal touch to the discussions on the future of tech education.





In celebration of the Pan African Youth Day celebration organized by the African Union in partnership with UN Women, AGCCI alumni Pendo Vestine represented Rwanda at the Pan-African Youth Forum in Algeria from November 1-4, 2024, where she won the Mini-Hackathon. Her innovative solutions and technical skills provided international exposure, bolstered her confidence, and showcased AGCCI's impact in nurturing young female leaders



In 2024, at the YouthConnekt Africa Summit—Africa's largest annual youth gathering—AGCCI alumni brought together young girls from Rwanda, Mali, Senegal, and Mozambique to showcase innovative projects aimed at bridging the gender digital literacy and skills gap. The projects featured mentorship applications and digital learning platforms, while panel discussions emphasized the importance of business sustainability and intellectual property protection.





African Girls Can Code Initiative (AGCCI)



Ms. Jennet Kem

UN Women Country Representative

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