

## STORY TELLING OF AMINATA DIAGNE

### CDEPS Rufisque Center



My name is Aminata Diagne, and I'm a 3rd year student in the Department of Geography at Cheikh Anta Diop University in Dakar. I'm one of the beneficiaries of the ICB and Coding courses at the Rufisque Center.

#### **What did you learn during the ST Foundation's basic computer science courses?**

The training was precious. It taught us how to use Word, Excel, and PowerPoint effectively. Before, I owned a computer but struggled to use it properly. Thanks to the training, I improved my skills and can now confidently navigate these programs. I've even started helping my younger siblings. It's made a real difference in our lives.

#### **How will these computer skills help in your daily life or at school?**

This experience has been a game-changer for me. I created my resume and now manage my email, send out job applications, and more. It's been beneficial, improving my skills and enabling me to help friends enhance their computer abilities.

#### **Can you share an example of something you've done with what you've learned in computer science?**

I've discovered apps like LinkedIn, and I'm on it almost constantly, aiming to grow my network. It's been a pivotal development for me.

#### **Has it changed the way you think about your future and your career?**

It's benefited my personal growth and sharpened my focus on future aspirations.

#### **Have other people in your community noticed what you've learned, and how has it affected their perspective on it?**

Yes, people in my community have noticed my new skills. I've been helping my siblings and friends learn about computers—teaching them how to create resumes in Word and make video presentations with PowerPoint. It's been an exciting experience. Their feedback has been positive; they find my explanations clear and easy to follow, encouraging them to learn.

#### **Do you have any suggestions for improving basic computer science courses and making them even more useful for students like you?**

Given the positive impact it's had, my suggestion is to make technology and training like this far more accessible. This would benefit me and future generations, including my younger sisters.

#### **Can you tell us about the coding courses?**

The journey was rewarding but not without challenges, as some aspects were complicated. However, with the support and guidance from Tony and Mustapha Diop, we were able to grasp and truly understand the essence of Coding.

**What did you learn in Coding and how did it help you?**

I learned to use temperature sensors and other devices to grasp the basics of specific technological components, like adjusting sounds and using flashing lights to measure temperature. That was the core of it. Continuing to practice our coding skills will be incredibly beneficial for us.

**Have you created any computer programs or special coding projects?**

Thanks to the classes, I could turn on the buzzers to the exercises.

**How do you feel about being able to code things?**

I feel somewhat privileged, as Coding isn't accessible to everyone. It represents a unique opportunity and potential for us, something valuable that we've managed to seize.

**Has it changed your dreams for the future?**

Yes, it has indeed influenced my dreams for the future. I'm determined to pursue this path, recognizing that it requires much practice to assimilate knowledge fully. It's a crucial step for me, even though I now possess valuable skills that set me apart.

**Do you think computer science and Coding are important for girls in your area?**

I believe computer science and Coding are crucial for girls in my area. Having these skills on a CV is a significant advantage, especially considering the recruitment criteria of some workplaces. It offers a privilege to possess knowledge in this domain. We, as women, are often in vulnerable positions, so it's essential to equip ourselves with competence and skills to strengthen our standing.

**Can you share a story that shows how these courses have helped you personally?**

After participating in the coding courses, I've realized the importance of continuous practice in mastering coding skills. It's clear that this knowledge will be beneficial in everyday life. My focus is on memorizing and applying what I've learned. This experience has enhanced my technical skills and boosted my confidence in navigating future opportunities.

**What would you say to other girls who want to learn computer science and Coding like you did?**

I would encourage other girls to pursue computer science and coding training enthusiastically. In the near future, digital literacy, particularly in IT, will become as traditional literacy. IT skills are becoming a priority in every field, offering a key advantage. I believe it is an asset for empowerment. I hope many more girls will seize this opportunity.

**If you have any ideas for improving coding lessons, what suggestions would you share to help other students like you?**

I suggest more hands-on practice and real-world applications within the curriculum to improve coding lessons. Engaging in practical exercises can significantly enhance understanding and skill retention. Encouraging students to work on projects that interest them can foster a deeper passion and commitment to learning coding. This approach will make lessons more interactive, enjoyable, and impactful in the long run.

## STORYTELLING OF YACINE NDAO

### CDEPS Rufisque Center - ICB and Coding student

My name is Yacine Ndao. I am a student in cyber-security at the UVS (Virtual University of Senegal). I participated in the ICB and coding courses at the Cdeps of Rufisque.



#### **What did you learn during the ST Foundation's basic computer science courses?**

During the basic computer courses, we learned the components of the computer, how to use it, and the software. We mainly learned Windows and Microsoft documents like Word, Excel, and PowerPoint.

#### **How will these computer skills help in your daily life or at school?**

As a student, the training was instrumental in enhancing my skills. It taught me how to write professional resumes and create engaging

presentations in PowerPoint. Moreover, the classes improved my proficiency with Word, especially in writing letters. This newfound competence has been a valuable addition to my skill set.

#### **Can you share an example of something you've done with what you've learned in computer science?**

Certainly! One practical application of what I've learned in computer science is assisting my father with his correspondence. Now, I help him write his letters and manage other digital tasks. This has strengthened my skills and offered tangible support to my family.

#### **Has it changed the way you think about your future and your career?**

Yes, the training has shifted my perspective on my future and career. It has broadened my vision, sparking a deeper interest in computer science. Given my focus on cybersecurity, this expanded knowledge base will undoubtedly be a significant asset.

#### **Do you have any suggestions for improving basic computer science courses and making them even more useful for students like you?**

Extending the course's duration could provide more time to delve deeper into computer science concepts, allowing for a broader exploration and understanding of the field.

#### **Can you tell us about the coding courses?**

The Coding course opened up a whole new world for me. We got to experiment with tangible applications like lighting lamps and using buzzers. We also delved into how to display messages on LED and LCD screens. It was hands-on and immersive, making the abstract concepts of Coding indeed come to life.

**What did you learn in Coding, and how did it help you?**

It equipped me with the skills to program machines, an essential ability in our increasingly digital world. More than that, it enhanced my computer science knowledge, especially with practical applications like Excel.

**Have you created any computer programs or special coding projects?**

Yes, one of our standout projects was creating smart bins. This wasn't just about Coding; it was about applying what we learned to solve real-world problems. The project showed us the potential of our coding skills to make a tangible impact.

**How do you feel about being able to code things?**

I feel incredibly empowered. Learning to code has opened up a new realm of possibilities for me.

**Has it changed your dreams for the future?**

Before this course, I hadn't fully grasped the extent to which technology underpins our everyday lives. Now, I see Coding as a skill and a critical tool for innovation and problem-solving. I'm inspired to use these skills to excel in the tech field.

**Do you think computer science and Coding are important for girls in your areas?**

Certainly, computer science and Coding are vital for girls in our area. These skills empower us to challenge stereotypes and open up endless opportunities.

**Can you share a story that shows how these courses have helped you personally?**

As mentioned before, I plan to engage in more practical exercises. This would greatly benefit us in our daily lives. For the time being, I'm committed to retaining what I've learned about coding over the past week.

**What would you say to other girls who want to learn computer science and Coding like you did?**

I would say, dive in. The world of Coding is vast and full of opportunities. While it might initially seem intimidating, the potential to create, innovate, and solve problems is immense.

**If you have any ideas for improving coding lessons, what suggestions would you share to help other students like you?**

Expanding the course duration would be highly beneficial. More time means more depth—we could explore a broader range of topics, tackle more complex projects, and truly solidify our understanding of Coding.

## STORYTELLING OF AWA NDIAYE

### **Pire Center: ICB and coding student**

I am Awa Ndiaye, a student at Cheikh Anta Diop University in Dakar (UCAD). I do physical science. I did the training on ICB courses and Coding courses at the Pire Center.

#### **What did you learn during the STMicroelectronics Foundation's basic computer science courses?**

At the ST Foundation's basic computer course, I mastered essential skills: turning on the computer, making copies and pastes, sending emails, and performing calculations using Excel and Word. These foundational skills have been enlightening.

#### **How will these computer skills help in your daily life or at school?**

These skills have significantly aided my school life, especially at Ucad, where we touched on computer science but not in depth. Now, I can apply these skills for more efficient study and research.

#### **Can you share an example of something you've done with what you've learned in computer science?**

I wrote job application letters and delved into calculations using Microsoft Excel. These practical applications of what I learned have been directly helpful.

#### **Has it changed the way you think about your future and your career?**

Absolutely. My career aspirations shifted from working in labs to becoming a developer, a change spurred by the training I received.

#### **Have other people in your community noticed what you've learned, and how has it affected their perspective on it?**

My friends and family have noticed my enthusiasm for computer science and Coding, sparking curiosity and interest.

#### **Do you have any suggestions for improving basic computer science courses and making them even more useful for students like you?**

Increasing the course duration would allow more time for hands-on practice with Excel and Word. Additional modules, especially on Internet proficiency, would enhance our learning experience.

#### **Can you tell us about the coding courses?**

The coding courses were incredibly engaging, introducing us to real-world applications of Coding, such as creating traffic lights and automated doors.



**What did you learn in Coding and how did it help you?**

I learned to code functional projects, like traffic lights and soil moisture sensors. These projects taught me the practical impacts of Coding in everyday life.

**Have you created any computer programs or special coding projects?**

Yes, these projects have shown me the tangible outcomes of coding skills, from traffic lights to soil moisture calculators.

**How do you feel about being able to code things?**

Learning to code was transformative. Completing projects I once thought impossible has been deeply fulfilling.

**Has it changed your dreams for the future?**

My dreams have evolved. Inspired by web development, I now aspire to create my platforms and applications.

**Do you think computer science and Coding are important for girls in your area?**

Absolutely. Learning Coding and computer science can be life-changing for girls, offering new opportunities and empowerment.

**Can you share a story that shows how these courses have helped you personally?**

After the courses, I contacted a developer for further training in advanced programming languages like Python and Java, aiming to deepen my knowledge.

**What would you say to other girls who want to learn computer science and Coding like you did?**

I'd encourage them to look beyond conventional uses of computers and see the vast possibilities coding offers, from careers to starting businesses.

**If you have any ideas for improving coding lessons, what suggestions would you share to help other students like you?**

Expanding the curriculum and increasing class time would allow students to explore more deeply and practice extensively, enhancing the learning experience.

## STORYTELLING OF FATOU NDOYE

### Pire Center: ICB and coding student

I am Fatou Ndoeye, a Gaston-Berger University of Saint-Louis UFR LSH student in Licence 3. I have benefited from the ICB and Coding courses at the Pire Center.

#### **What did you learn during the STMicroelectronics Foundation's basic computer science courses?**

In the courses offered by the STMicroelectronics Foundation, we covered a range of essential computer skills, including performing calculations in Excel, entering text, scanning documents, and sending emails. These foundational skills have equipped us with a solid base in computer science.

#### **How will these computer skills help in your daily life or at school?**

The skills learned are practical for everyday tasks and academic work. They enable us to efficiently manage documents, such as copying, pasting, saving files, and organizing folders for class materials. Additionally, we can create texts and presentations, enhancing our ability to communicate and present information effectively.

#### **Can you share an example of something you've done with what you've learned in computer science?**

I've assisted friends who struggle with basic computer operations, like retrieving documents. Using the knowledge gained from the training, I've helped them navigate their way through these tasks, demonstrating the practical application of the skills learned.

#### **Do you have any suggestions for improving basic computer science courses and making them even more useful for students like you?**

To enhance the learning experience, it would be beneficial to increase the availability of computers and offer additional training sessions. This would not only improve our practical skills but also expand our critical thinking abilities on a global scale.

#### **Can you tell us about the coding courses?**

The coding courses were incredibly insightful, emphasizing the importance of understanding how different systems and technologies operate.

#### **What did you learn in Coding and how did it help you?**

The Coding course expanded our understanding of technology, introducing us to managing sound sensors and operating systems like traffic lights and toll roads. It provided a comprehensive overview of how such technologies are implemented in real-world scenarios, such as in large retail stores.

#### **Have you created any computer programs or special coding projects?**





Through Coding, I've learned to manipulate colors and time, enhancing my creative and technical skills. The training has been encouraging me to explore and innovate with new projects.

**How do you feel about being able to code things?**

I feel a sense of pride in my ability to understand and create with Coding. It has revealed the mechanisms behind the technologies I use daily, from lighting systems to traffic management.

**Has it changed your dreams for the future?**

Yes, the training has significantly changed my aspirations, broadening my perspective on what's possible and enhancing my problem-solving skills on a global level.

**Do you think computer science and Coding are important for girls in your area?**

I believe computer science and Coding are crucial for girls in my area. These fields offer the tools and knowledge to participate in the digital world and shape it.

**Can you share a story that shows how these courses have helped you personally?**

Through the coding course, I discovered my passion and ability for technology.

**What would you say to other girls who want to learn computer science and Coding like you did?**

I strongly encourage other girls to pursue computer science and Coding. It's a valuable skill set that opens up numerous opportunities and facilitates a deeper understanding of the world.

**If you have any ideas for improving coding lessons, what suggestions would you share to help other students like you?**

My suggestion would be to extend the duration of courses and enrich the content, ensuring we have ample time to comprehend complex concepts and practice them thoroughly.



## STORYTELLING OF HOULEYMATOU THIMBO

### Guinguineo Center: ICB and coding student

I'm Houleymatou Thimbo, a beneficiary of the ICB and Coding courses at the ST center in Guinguineo,

**What did you learn during the STMicroelectronics Foundation's basic computer science courses?**

During the basic computer course, we learned how to use a computer, including how to turn it on, create documents, and edit texts in Word, among other things. We also learned about Excel and PowerPoint.



**How will these computer skills help in your daily life or at school?**

Computer skills are essential nowadays as we prepare to enter the workforce. I am a student, so computer science helps me a lot. I do my exercises without asking for help from anyone. And all this is thanks to the computer science courses at the ST center in Guinguineo.

**Can you share an example of something you've done with what you've learned in computer science?**

Today, I can type my own texts, calculate my homework grades using Excel, and do some exercises, especially research on my machine.

**Has it changed the way you think about your future and your career?**

Indeed, this training took me out of my comfort zone. I mean the limited goals I had set for myself. Now that I have computer skills, why not pursue studies in this field and create my own business?

**Have other people in your community noticed what you've learned, and how has it affected their perspective on it?**

I share my experiences at home after each class, which has undoubtedly aroused the curiosity of my relatives, brothers, sisters, and even parents. My younger brothers and sisters also want to study computer science to spark their curiosity.

**Do you have any suggestions for improving basic computer science courses and making them even more useful for students like you?**

I request an increase in class hours, as two weeks are not enough. I also demand that the training be extended to our younger brothers and sisters in other areas of the country. Otherwise, I can only thank you for this opportunity offered to the youth of Guinguineo.

**Can you tell us about the coding courses?**

Honestly, I was very impressed on the first day of coding classes. I thought it was extraordinary. A discovery, I mean, because everything we saw and was unknown to us in this field, we learned. The lights, LEDs, elevators, and more.

**What did you learn in Coding and how did it help you?**

We learned how to program a lamp to turn on, make it blink, project a message on LCD screens, and obtain sound using buzzers. It's not accessible to everyone, so I want to explore it further to make it my profession.

**Have you created any computer programs or special coding projects?**

Personally, I have not yet created a special project based on what I learned because I do not have the equipment. My only experiences were during the classes with the exercises given to us in class.

**How do you feel about being able to code things?**

It made me think a lot, and I even want to create things that are accessible to everyone and can also be helpful.

**Has it changed your dreams for the future?**

Yes, it made me think a lot, and I even want to create things that are accessible to everyone and can also be useful.

**Do you think computer science and Coding are important for girls in your area?**

These are interesting courses. Coding, which I thought was inaccessible, has come to me thanks to this project. As a girl, we must make extra efforts to gain more skills in our lives. We need to be self-sufficient, and for that, we need training. You know, most girls here leave school early for marriage, so it would be good for us to have degrees before marriage, and this could allow us to create our own business.

**Can you share a story that shows how these courses have helped you personally?**

When I discovered Coding, I knew it was a very special field. It's not accessible to everyone, so I want to explore it further to make it my profession.

**What would you say to other girls who want to learn computer science and Coding like you did?**

To the girls in my locality, I urge them not to hesitate if another opportunity arises. It's a program that will certainly end, but if there are others, I advise them to go and get trained because it's always good to learn new things.

**If you have any ideas for improving coding lessons, what suggestions would you share to help other students like you?**

My message is for future beneficiaries; I advise them to concentrate well during coding classes because the better we concentrate, the better and faster we understand. For me, it's not just about being part of the group but having an experience after the training to make good use of it.

## STORYTELLING OF AÏSSATOU DIALLO

### Guinguineo Center: ICB and coding student

My name is Aïssatou Diallo. I am 19 years old, and I am a student.

**What did you learn during the STMicroelectronics Foundation's basic computer science courses?**

During the courses, we learned how to operate a computer, including turning it on and off and using software like Word, Excel, and PowerPoint. For each of these programs, we learned how to utilize them effectively.

**How will these computer skills help in your daily life or at school?**

During these computer courses, I learned to be more organized. I no longer need to write my schedule in my notebooks; I type it up in Word and save it. I've also started summarizing my courses on my computer, and all this is thanks to what I learned here in this course. I also conduct research on the Internet for my classes or presentations.

**Can you share an example of something you've done with what you've learned in computer science?**

I designed an invitation card that I showed to people around me. They were even surprised when I told them I had made it myself.

**Has it changed the way you think about your future and your career?**

I now believe that computer science opens up new scenarios, so I plan to exploit them. After my baccalaureate, I intend to enhance my computer skills, and then I can focus on my future.

**Have other people in your community noticed what you've learned, and how has it affected their perspective on it?**

I love sharing, and I always have. After each class, I share everything I learned that day at home. This leads to people asking me questions about the things I explain to them.

**Do you have any suggestions for improving basic computer science courses and making them even more useful for students like you?**

I wish this training could be expanded to high schools so that some of my peers could benefit from it. For example, we don't have this subject in my high school, and it would fill a gap.

**Can you tell us about the coding courses?**

It was a very knowledge-rich course and very important. It allowed us to demystify certain puzzles, such as how water heaters work.

**What did you learn in Coding, and how did it help you?**



We learned a lot, especially about what Coding and programming are. Through practical exercises, we were able to do things with the material.

**Have you created any computer programs or special coding projects?**

Yes, during the practical exercises at school, as mentioned earlier, I made a LED blink and produced sound with buzzers.

**How do you feel about being able to code things?**

We were proud of ourselves. I thought to myself, coming here, I couldn't even turn on a computer, and now I am programming, which is extraordinary. I was excited; that's the right word.

**Has it changed your dreams for the future?**

In Senegal, there are few coding teachers; personally, I've never met one. So, if we can acquire skills in this field, I think it's an opportunity for those of us who are currently in secondary school. From my side, I will research this field to understand the opportunities.

**Do you think computer science and Coding are important for girls in your area?**

We, the girls, are always in the background, but fortunately, many programs are correcting this discrimination. So when we hear about such initiatives, we must not hesitate to seize them.

**Can you share a story that shows how these courses have helped you personally?**

Coding has empowered me to grasp concepts that were previously beyond my comprehension.

**What would you say to other girls who want to learn computer science and Coding like you did?**

I tell girls who want to learn computer science to go for it because it's a profession of the future. In a society where we have a patriarchal system, we women must be very ambitious and incredibly competent to assert our rights.

**If you have any ideas for improving coding lessons, what suggestions would you share to help other students like you?**

Girls are as talented as boys, so we need more awareness about this training so that other sisters can benefit from the program.

## STORYTELLING OF CÉSARTINE NATASHA

### **Nyassia Center: ICB and coding student**

My name is Césartine Natasha Bassène. I am attending secondary school in Nyassia and participating in basic IT and coding courses.

**What did you learn during the STMicroelectronics Foundation's basic computer science courses?**

We learned how to input text, open new files, and type effectively.

**How will these computer skills help in your daily life or at school?**

The impact is significant because I had very little understanding of computers before, and these courses have greatly enhanced my skills. Now, I can efficiently type, edit, and format text.

**Has it changed the way you think about your future and your career?**

Absolutely, it has completely transformed my perspective. I now realize the importance of IT, which I had previously underestimated.

**Have other people in your community noticed what you've learned, and how has it affected their perspective on it?**

Yes, many people have shown interest in the training I received despite not having the same opportunity. This includes boys in my village and my class, as well as girls in the scientific stream who weren't part of the training group.

**Do you have any suggestions for improving basic computer science courses and making them even more useful for students like you?**

Increasing the number of computers would be beneficial, as during the courses held at the town hall, we had to share one computer between two students.

**Can you tell us about the coding courses?**

In the coding courses, we learned about how colors work, how mobile phones function during calls, immunity, and even elevators.

**Have you created any computer programs or special coding projects?**

Yes, we managed to display words on an LCD screen during our classroom exercises.

**How do you feel about being able to code things?**



It was thrilling to see our code come to life; it made us curious about how things work.

**Has it changed your dreams for the future?**

Indeed, it expanded our dreams significantly, fueling our imaginations and aspirations to start our own businesses in the future.

**Do you think computer science and Coding are important for girls in your area?**

Certainly, it's crucial for girls in our region that's often disconnected from IT. Access to free computer courses is a valuable opportunity.

**What would you say to other girls who want to learn computer science and Coding like you did?**

I would encourage them to pursue computing and coding, as these fields offer strong job security.

**If you have any ideas for improving coding lessons, what suggestions would you share to help other students like you?**

I believe that coding, being a critical aspect of computing, should be introduced earlier in our education.

## STORYTELLING OF YOLANDE SAGNA

### Nyassia Center: ICB and coding student

I am Yolande Sagna, and I am currently attending high school in Nyassia.

**What did you learn during the STMicroelectronics Foundation's basic computer science courses?**

In the courses, I gained new skills in writing text, displaying it, and correcting errors in computing. This foundational knowledge is crucial for understanding and applying computing in various aspects of daily life and education.



**How will these computer skills help in your daily life or at school?**

These skills are pivotal as they open up opportunities. For me personally, they are key for pursuing education at prestigious institutions like the Virtual University of Senegal. Overcoming my apprehension, I now see the vital role of IT in securing a promising future.

**Has it changed the way you think about your future and your career?**



Absolutely, learning computing has fundamentally altered my perception of my future and potential career paths. Initially, my aspirations were limited by what I knew and understood. Now, equipped with these new skills, I see a world of possibilities in technology and innovation.

**Have other people in your community noticed what you've learned, and how has it affected their perspective on it?**

The change has been noticeable to those around me, particularly my family and friends. My ability to manage and execute computing tasks, coupled with my enthusiasm for coding, has sparked interest and admiration within my community.

**Do you have any suggestions for improving basic computer science courses and making them even more useful for students like you?**

I'd like to see the project developed further. We want to continue the courses but also allow others to benefit from them because there are boys who also want to do IT.

**Can you tell us about the coding courses?**

The coding courses introduced us to programming, teaching us about how colors and telephones operate under specific conditions. This knowledge was both fascinating and immensely useful.

**Have you created any computer programs or special coding projects?**

Yes, during an exercise, our trainer tasked us with creating a program to display writing on the screen, which we accomplished successfully.

**Has it changed your dreams for the future?**

I feel incredibly proud and empowered. My success in coding has broadened my perspective and opened up new possibilities for my future.

**Do you think computer science and Coding are important for girls in your area?**

Definitely. Coding is vital as it enables us to achieve things beyond our imagination. I strongly encourage girls to pursue courses in IT and coding.

**What would you say to other girls who want to learn computer science and Coding like you did?**

I would say that IT is crucial in today's world. Having a basic understanding of computing, along with coding skills, is not just an advantage but a necessity.

**If you have any ideas for improving coding lessons, what suggestions would you share to help other students like you?**

I suggest revising the timetable to increase the hours dedicated to lessons. This would allow us more time to learn and practice, enhancing our understanding and skills in coding.



## STORYTELLING OF OUMOU SIDIBÉ, ICB TEACHER IN GUINGUINEO

**Can you tell us about the overall aim of the basic computer courses you taught?** The primary goal of these courses was to enable students and all participants first to become acquainted with and then adept at using computers. This includes writing documents, performing calculations in Excel, and utilizing email. Additionally, the courses allow those who have never had access to computer technology to take free computer classes.



**What were the main topics or skills covered in these courses, and why did you choose them?**

We focused on Word, Excel, and PowerPoint software. Word is the gateway and foundation of computer literacy, essential to master before learning about the differences and utilities of other software and their functions. We also taught them about the Internet.

**Can you share examples of specific progress or achievements your students made during these courses?**

At the end of each course, we conducted final tests to measure the learners' understanding. The consistently high pass rates validated our efforts, demonstrating the effectiveness of our teaching. Occasionally, we intentionally made mistakes during lessons, and students could correct them, showing their progress.

**Have you noticed a change in self-confidence or interest in computing among your students over time?**

Indeed, students show excellent enthusiasm and punctuality and sometimes express how quickly time passes during classes, indicating their interest and enjoyment in learning. We see a diverse group of students, including high school students, college students, and entrepreneurs, who are becoming more confident and independent, moving from needing constant assistance to starting their computers independently and preparing for lessons.

**How do you assess the overall impact of these courses on the students and their community?**

The feedback from the community has been overwhelmingly positive, with parents appreciating the free opportunity provided to their children. Students' testimonials also reflect significant progress and the practical application of their learning in their schools.

**Do you have any ideas for improving the course?**

Extending the course duration could enhance learning outcomes, as students have expressed concerns about the pace of the courses. A review to possibly increase the course hours could allow for better assimilation. Thank you.

## STORYTELLING OF RAMA NDIAYE, CODING TEACHER IN GUINGUINEO

### What was the main objective of the coding courses you taught?

The courses we taught primarily aimed to provide students with a foundational understanding of Coding, programming, and various programming languages.

### What programming languages or tools did you use, and why did you choose them?

We used Python, JavaScript, Java, and C++ as programming languages. These choices aligned with the organization's curriculum, enabling learners to engage in programming effectively.



### Can you share examples of impressive coding projects created by your students?

During the courses, students undertook projects such as creating a blinking LED in green, yellow, and red. They also developed a sound effect using buzzers and displayed text on an LCD screen.

### Have you noticed an improvement in problem-solving skills or logical thinking among your students through these courses?

We observed significant improvements in students' practical skills, especially in problem-solving and logical thinking, as a result of these courses.

### How do you perceive the impact of these courses on the motivation and career aspirations of computer science students? Do you have any ideas for improving the course?

The impact of these courses is substantial, providing students with valuable skills that will serve them in their academic and professional careers. Mastery of computer tools is a significant advantage, and adding coding skills, which are not widely accessible in our country, presents a unique opportunity. These young women can leverage this to succeed in the future.

To further enhance the course, engaging with real-world projects or partnerships with technology companies could provide practical experience and exposure to the professional environment.

## STORYTELLING OF IBRAHIMA SANÉ, ICB AND CODING TEACHER IN NYASSIA

**Can you tell us about the overall aim of the basic computer courses you taught?** The primary objective of our basic computer courses was to equip individuals who had either never used a computer before or had commenced basic training but could not complete it with the necessary skills to proficiently operate a computer. This foundational knowledge is crucial in bridging the digital divide and empowering students with the tools needed for modern communication and information access.



**What were the main topics or skills covered in these courses, and why did you choose them?**

Our curriculum began with an introduction to the basics of computer use and the architecture of computers, emphasizing practical skills such as using Microsoft Word. We meticulously guided our students through the process of opening a document, typing, and formatting pages. These subjects were chosen to lay a solid foundation, ensuring that students are well-equipped to handle common computer operations, which are essential skills in today's digital world.

**Can you share examples of specific progress or achievements your students made during these courses?**

Remarkable progress was observed among our students. Initially, many were unable to perform basic tasks such as writing or navigating a computer. However, as the courses progressed, they mastered operating computers, creating documents, and even constructing and populating tables. This represents a significant leap forward in their journey towards digital literacy.

**Have you noticed a change in self-confidence or interest in computing among your students over time?**

Absolutely. There has been a noticeable increase in self-confidence among our students. Initially, a lack of confidence was a barrier to learning, but their self-assurance grew as they became more proficient. This newfound confidence has positively impacted their approach to learning.

**How do you assess the overall impact of these courses on the students and their community?**

The impact has been transformative. Enabling students who had never before used a computer to do so confidently, write texts, construct tables, and communicate via email represents a significant empowerment. This capability not only benefits the individual students but also has the potential to enrich their communities by fostering skills that are increasingly vital in the modern world.

**What was the main aim of the coding classes you taught?**

The coding classes were designed to inspire and educate students about the pervasive nature of coding in everyday life. Our goal was to demystify technology and show that coding is the driving

force behind many aspects of modern life, thereby encouraging curiosity and understanding among the students.

**What programming languages or tools did you use, and why did you choose them?**

We opted for Python due to its simplicity and wide-ranging applications, paired with the STM32 Microcontroller Nucleo L476RG for hands-on exercises. Python is an excellent starting point for beginners because of its readability and the breadth of its applications, making it a practical choice for introducing students to programming concepts.

**Can you share any examples of impressive coding projects created by your students?**

One standout project involved the creation of an intelligent dustbin that would open upon sensing someone approaching and change color after an object was thrown into it. This project demonstrated the students' ability to apply their coding skills to real-world problems and showcased their creativity and innovation.

**Have you noticed any improvement in your students' problem-solving or logical thinking skills as a result of these courses?**

Yes, there has been a significant enhancement in their problem-solving and logical thinking abilities. The coding classes have fostered a greater appreciation for mathematics among the students, many of whom were previously disinterested in the subject. This new interest has translated into improved academic performance in mathematics and a better understanding of the logical foundations required for coding.

**How do you see the impact of these courses on the motivation and career aspirations of female computer science students?**

The courses have had a profoundly positive impact, challenging preconceived notions that coding and computer science were domains reserved for mathematically gifted or inherently talented individuals. Witnessing their own progress and achievements, many students, particularly females, have been inspired to pursue new challenges and consider careers in technology fields they previously thought were beyond their reach.

**Do you have any ideas for improving the course?**

Additional resources such as Arduino kits for more hands-on coding experience and increased available computers are necessary to further enhance the course. Expanding the curriculum to include C++ programming with Arduino and more advanced projects using the STM32 Kit from Vittascience would offer students broader exposure to the possibilities within coding and technology.