# ABOUT THE AUTHOR

**Mutangana Joseph** is a passionate young man with a deep interest in technology, education, and personal growth. Currently studying Software Engineering at the Adventist University of Central Africa (AUCA), he is focused on mastering the foundations of computing and sharing that knowledge with others in a clear and simple way.

Born and raised in Rwanda, Mutangana has always valued learning and self-discipline. From an early age, he developed a curiosity about how computers work, what makes them powerful tools, and how people can use them to solve problems in everyday life. That early curiosity became a strong passion that continues to grow as he gains more experience and understanding.

Mutangana believes that technology should be accessible to everyone. He understands that many people in his community are eager to learn how to use computers but don’t know where to start. That’s what motivated him to write this small book—a simple, friendly guide for beginners to step into the digital world with confidence.

He is also someone who values humility and steady progress. Instead of rushing through complex tools and programming frameworks, he takes time to build a strong foundation, revisiting the basics until he understands them well. His study journey is not just about getting a degree—it’s about becoming a better person, one step at a time.

One of his deepest motivations is the encouragement and trust his family places in him. His parents and brother believe in his potential, and that fuels his desire to succeed academically and personally. He wants to become someone they can be proud of—a role model for young people in his village and beyond.

Mutangana also values reputation and integrity. In his village and among those who know him, he is seen as intelligent and well-mannered. He works hard to maintain that good image, knowing that respect is not just given but earned through consistent action and discipline.

Though his journey hasn’t always been smooth, he has chosen to leave behind the past and focus on a brighter, more meaningful future. Each new day is a fresh opportunity to grow, to study, to help others, and to become the man he dreams of becoming.

Outside academics, Mutangana enjoys thoughtful conversations, quiet reflections, and moments of connection with others. He believes that kindness—even something as simple as a smile or a greeting—can make someone’s day better. It’s those small, human interactions that give life meaning.

He’s also very interested in applied mathematics, especially linear algebra and its use in software development. He enjoys problem-solving and logical thinking, which he sees as keys to success in his chosen field. For him, studying isn’t a burden—it’s a blessing and a calling.

Mutangana uses tools like Linux, LibreOffice, and WPS Office not just because they are free, but because they represent independence and the ability to learn on your own. He values simplicity and efficiency, always looking for ways to improve his workflow without being distracted by trends.

His future goals include finishing his degree within four years, becoming a skilled software engineer, and giving back to his community. He dreams of one day building educational tools and platforms that help others learn in their own languages and at their own pace.

To the readers of this book, Mutangana says: "Start small, stay focused, and never doubt your ability to learn. I wrote this for you—someone who may feel lost with computers but has the heart to keep trying. Let’s learn together."

# PREFACE

In a world where technology is becoming part of everything we do, understanding computers is no longer a luxury—it’s a basic skill. Yet, many people still feel lost or afraid when faced with a screen, a keyboard, or unfamiliar terms like “software,” “internet,” or “cloud.” I wrote this small book to be a gentle introduction—a guide that speaks simply, clearly, and directly to beginners.

This book is not for experts. It’s not filled with technical language or complicated theories. It’s for people who want to learn the basics of computers without pressure or fear. It’s for students who are just starting, parents who want to catch up, workers trying to improve their skills, and even young learners curious about what’s inside a computer.

My inspiration came from the people around me—especially those who asked me questions like, “How do I create a document?” or “What does a CPU really do?” I saw the confusion in their eyes, but I also saw their desire to learn. I realized that sometimes, all someone needs is a little help getting started. That’s what this book aims to provide.

Learning doesn’t have to be stressful. It can be peaceful, even joyful, if the material is explained in a friendly tone. So, in this book, I’ve kept things simple. I avoided heavy technical terms unless they were really necessary—and when I used them, I explained them in plain language.

I didn’t write this book because I know everything. I wrote it because I’m still learning too. As a student of Software Engineering, I’ve come to appreciate how important the basics are. No matter how far you go, your foundation will always matter. That’s why I take it seriously—and that’s why I’m sharing it with you.

This book is also a reminder that knowledge should be shared. What good is learning if you keep it to yourself? I believe in passing it on—in making it easier for the next person. If this book helps even one person feel more confident around computers, then it has served its purpose.

Every chapter was written with care and with real people in mind. I imagined someone reading it quietly at home, or printing it out to study offline, or using it as a class guide. I imagined someone flipping back to reread a concept—not because they’re slow, but because they’re serious. If that’s you, then I want you to know: you are not alone. And you are capable.

This project also reflects my values. I believe in simplicity, respect, and consistency. I believe that education should be humble, not proud. It should lift people up, not make them feel small. That’s the spirit I tried to carry into every page of this work.

I want to thank everyone who has encouraged me in my journey so far—my family, my instructors, my friends, and anyone who believes in the power of small beginnings. You have no idea how far your support goes. It’s not just academic—it's emotional, mental, even spiritual.

To my fellow students: keep going. It doesn’t matter how slow your progress feels—what matters is that you’re moving. Don’t compare yourself to others. Everyone learns at their own pace. Just be consistent, and you'll be surprised how far you can go.

To the readers I may never meet: I hope this book is useful to you. I hope it gives you clarity, confidence, and maybe even a little joy. I hope it makes you feel that learning is within reach, no matter your background, your age, or your past experiences.

And finally, to anyone holding this book with doubt in their heart—wondering if they can really learn computers—I say: Yes, you can. This is just the beginning. I’m cheering for you.

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# CHAPTER 1

### Chapter 1: Introduction to Computer

#### 1.1 What is a Computer?

A computer is an electronic machine that receives input, processes data, stores information, and produces output. It follows a set of instructions known as a program.

#### 1.2 Characteristics of a Computer

**Speed:** Performs millions of tasks in seconds.

**Accuracy:** Performs calculations and operations correctly if programmed well.

**Automation:** Can carry out tasks automatically once instructions are given.

**Storage:** Can store huge amounts of data permanently or temporarily.

#### 1.3 Basic Functions of a Computer

**Input:** Data is entered (keyboard, mouse).

**Processing:** CPU processes instructions.

**Storage:** Data is saved (RAM, hard disk).

**Output:** Results are shown (monitor, printer).

#### 1.4 Types of Computers

**Desktop:** Personal and office use.

**Laptop:** Portable computer.

**Tablet:** Touchscreen-based device.

**Smartphone:** Mobile device with computing power.

**Embedded Systems:** Found in cars, appliances, etc.

#### 1.5 Importance of Computers in Daily Life

Computers are used in:

**Education:** Online learning, typing assignments.

**Business:** Accounting, communication, inventory.

**Healthcare:** Patient records, diagnostics.

**Communication:** Emails, chats, social media.

**Entertainment:** Games, music, movies.

# CHAPTER 2

### Chapter 2: Hardware and Software

#### 2.1 What is Hardware?

Hardware refers to the physical parts of a computer. Examples include:

**Monitor:** Displays visuals.

**Keyboard:** Inputs text.

**Mouse:** Navigates interface.

**CPU (Central Processing Unit):** Processes instructions.

**RAM (Random Access Memory):** Temporary storage for running programs.

**Hard Drive/SSD:** Permanent storage.

#### 2.2 What is Software?

Software is the collection of programs or instructions that tell the hardware what to do.

**System Software:** Manages hardware (e.g., Windows, Linux).

**Application Software:** Used to perform tasks (e.g., Word, Excel, browser).

**Utility Software:** Performs maintenance tasks (e.g., antivirus, file managers).

#### 2.3 Relationship Between Hardware and Software

Hardware needs software to function, and software needs hardware to run. They work hand in hand—like the body (hardware) and the mind (software).

#### 2.4 Input and Output Devices

**Input Devices:** Keyboard, mouse, scanner, microphone.

**Output Devices:** Monitor, printer, speakers, projectors.

# CHAPTER 3

### Chapter 3: Operating System

#### 3.1 What is an Operating System?

An OS is a software that acts as a bridge between the user and hardware. It helps manage files, applications, and system resources.

#### 3.2 Functions of an Operating System

File management

Memory management

Task scheduling

User interface (Graphical or Command-line)

Device management (printers, USBs)

#### 3.3 Examples of Operating Systems

**Windows:** Common in schools and businesses.

**Linux:** Free and open-source, used in programming and servers.

**macOS:** Found in Apple computers.

**Android:** Used in smartphones and tablets.

#### 3.4 User Interfaces

**GUI (Graphical User Interface):** Mouse-based, visual (Windows, Ubuntu).

**CLI (Command Line Interface):** Text-based commands (Linux terminal, CMD).

# CHAPTER 4

### Chapter 4: Basic Application

#### 4.1 Word Processors

Used for writing documents, such as letters or books.

Examples: WPS Writer, LibreOffice Writer, MS Word.

Features: Formatting text, inserting images, spellcheck.

#### 4.2 Spreadsheets

Used for calculations, data organization, and charts.

Examples: WPS Spreadsheets, LibreOffice Calc, MS Excel.

Uses: Budgets, student marks, business tracking.

#### 4.3 Presentation Software

Used to create visual slide presentations.

Examples: WPS Presentation, PowerPoint.

Features: Slides, animations, images, and text.

#### 4.4 Web Browsers

Used to access the internet.

Examples: Google Chrome, Mozilla Firefox, Microsoft Edge.

Uses: Searching, watching videos, emails, social media.

# CHAPTER 5

### Chapter 5: Internet and Safety

#### 5.1 What is the Internet?

The internet is a global network of computers that allows communication and information sharing.

#### 5.2 Basic Internet Services

**Web Browsing:** Searching for information.

**Email:** Sending messages electronically.

**Cloud Storage:** Saving files online.

**Social Media:** Connecting and sharing with others.

#### 5.3 How to Connect to the Internet

**Wi-Fi:** Wireless connection.

**Ethernet Cable:** Wired connection.

**Mobile Data:** Using SIM card data.

#### 5.4 Cyber Safety Tips

Use strong passwords.

Don’t share personal data.

Avoid suspicious links or downloads.

Update your software regularly.

Install antivirus programs.

#### 5.5 Positive Uses of the Internet

E-learning and online courses

Applying for jobs

Communicating with friends and family

Reading news and doing research