

This is the errata for the book

Cryptography and Embedded Systems Security, Xiaolu Hou, Jakub Breier, ISBN: 978-3-031-62205-2, Springer Cham, 2024.
published version

<https://link.springer.com/book/10.1007/978-3-031-62205-2>

The author’s copy with errors corrected can be found in the following link:

<https://xiaoluhou.github.io/Textbook.pdf>

Location	Original	Change
Page 9, Algorithm 1.1, lines 2-4	<div><hr/><hr/>Input: $m, n // m, n \in \mathbb{Z}, m \neq 0$ Output: $\gcd(m, n)$ 1 while $m \neq 0$ do 2 $r = n \% m //$ remainder of n divided by m 3 $n = m$ 4 $m = r$ 5 return r</div>	<div><hr/><hr/>Input: $m, n // m, n \in \mathbb{Z}, m \neq 0$ Output: $\gcd(m, n)$ 1 while $m \neq 0$ do 2 $r = m$ 3 $m = n \% m //$ remainder of n divided by m 4 $n = r$ 5 return n</div>
Page 18, first paragraph below Definition 1.2.12	By definition, for any $a \in F$, there exists $b \in F$ such that ...	By definition, for any $a \in F, a \neq 0$, there exists $b \in F$ such that ...
Page 20, Example 1.2.24	$f(1 \oplus 0) = f(1) = a, f(1) + f(0) = a + b = a$	$f(1 \oplus 0) = f(1) = b, f(1) + f(0) = b + a = b$
Page 49, Theorem 1.5.1	of $\deg(f(x)) \geq 1$	if $\deg(f(x)) \geq 1$
Page 51, Example 1.5.6	$\mathbb{F}_2[x]/(f(x)) = \{1, x, x + 1\}$ \dots $\mathbb{F}_2[x]/(g(x)) = \{1, x, x + 1\}$	$\mathbb{F}_2[x]/(f(x)) = \{0, 1, x, x + 1\}$ \dots $\mathbb{F}_2[x]/(g(x)) = \{0, 1, x, x + 1\}$
Page 139, RSA security	Nevertheless, post-quantum public key cryptosystems are being proposed (see e.g. [HPS98, BS08]) to protect communications after a quantum computer is built.	Nevertheless, post-quantum public key cryptosystems are being proposed (see e.g. [HPS98, BS08]) to protect communications after a sufficiently strong quantum computer is built.
Page 209, last paragraph of Section 4.1.1	Similar to SPA, the attack does not require statistical analysis of the traces, only visual inspection is enough.	The sentence should be removed