Errata Version 27 Sep 2024

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	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	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
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 $\deg(f(x)) \ge 1$	if $\deg(f(x)) \ge 1$
Page 51, Example 1.5.6	$\mathbb{F}_{2}[x]/(f(x)) = \{1, x, x+1\}$ $\mathbb{F}_{2}[x]/(g(x)) = \{1, x, x+1\}$	$\mathbb{F}_2[x]/(f(x)) = \{0, 1, x, x+1\}$ $\mathbb{F}_2[x]/(g(x)) = \{0, 1, x, x+1\}$
Page 106 Table 2.2 (b)	$egin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
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 (se 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