Thank you all for providing me feedbacks and corrections!

Chapter 1. See a Program Running

Chapter 2. Data Representation
- Page 38, last figure, “Barrow” should be “Borrow”.

Chapter 3. ARM Instruction Set Architecture
- Page 52, in the C code of strlen, “while( pStr[i] ){ i++ }” should be “while( pStr[i] ){ i++; }”
- Page 56, last paragraph, “smart match” should be “smart watch”.
- Page 60, the paragraph under Figure 3-4, “to order to” should be “in order to”
- Page 64, bullet 3, “a register shifted to a constant amount of bits” should read as “a register shifted by a constant amount of bits”

Chapter 4. Arithmetic and Logic
- Page 75, Section 4.1, first paragraph, “overflow (O)” should be “overflow (V)”.  
- Page 75, the bottom paragraph, “the process combines them” should be “the processor combines them”
- Page 92, in the middle, “MOV r1, #1, LSL #31” should be “MOV r1, #((1<<31))”.  
- Page 92, above the table, “because the result of exclusive OR is 0” should read as “because the result of AND is 0”.

Chapter 5. Load and Store
- Page 109, Question 5, we should add square brackets to register r0.
  
  LDRSB  r1, [r0]  
  LDRSH  r1, [r0]  
  LDRB   r1, [r0]  
  LDRH   r1, [r0]

Chapter 6. Branch and Conditional Execution
- Page 111, Section 6.1. “Table 2-3 lists the conditional flags” should be “Table 6-1 lists the conditional flags”
- Page 116, “their equivalent implement” should be “their equivalent implementation”
- Page 128, in Example 6-17, “r6 is branch index” should be “r2 is branch index”
Chapter 7. Structured Programming
- Page 139, Figure 7-5, all three “DCW” should be “DCD”.
- Page 140, Figure 7-6, all “DCW” should be “DCD”.

Chapter 8. Subroutines
- Page 162, first paragraph of Section 8.1, “use the branch and link (BL) instruction call a subroutine.” Should be “use the branch and link (BL) instruction to call a subroutine”.

Chapter 9. 64-bit Data Processing

Chapter 10. Mixing C and Assembly
- Page 228, First sentence of Section 10.3.1, “A C program can have inline assembly can by using the “__asm” keyword” should read as “A C program can have inline assembly by using the “__asm” keyword”
- Page 230, Example 10-14, “extern void strlen(char *s)” should be “extern int strlen(char *s)”

Chapter 11. Interrupt
- Page 251, under Figure 11-9, “processor might a different clocking scheme” should read as “processor might use a different clocking scheme”

Chapter 12. Fixed-point and Floating-point Arithmetic
- Page 238, section 11.2, “The processor serves stops” should read as “The processor stops the currently running interrupt handler”.
- Page 255, in Table 11-4, “mamufacturer” should be “manufacturer”.

Chapter 13. Instruction Encoding and Decoding

Chapter 14. Generic-purpose I/O
- Page 338, title of Figure 14-3, “Non-inverting means $V_{out}$ is connected to the non-inverting terminal (i.e., the plus input lead)” should read as “Non-inverting means $V_{in}$ is connected to the non-inverting terminal (i.e., the plus input lead)”
- Page 354, last paragraph, “loop up” should be “look up”
- Page 355, in Figure 14-22 flowchart, the “Yes” and “No” to the question “Is key released” should be swapped. In the same figure, we need to add a “No” to the branch of the second question “Are all column inputs one?”
- Page 356, in the second bullet point, “should changes the mode” should be “should change the mode”

Chapter 15. General-purpose Timers
- Page 365, first paragraph, “should sets” should be “should set”.
- Page 372, in Figure 15-11, “Brightness” should be “Brightness”.
- Page 374, “MOV r1, #TIM_ARR_ARR” should be “MOV r1, #TIM_ARR_ARR”.
- Page 374, “STR r0, [r7, #TIM_PSC]” should be “STR r1, [r7, #TIM_PSC]”.
- Page 381, bottom of the page, the comment “// Detect only rising edges in this example” should be read as “// Detect both rising and falling edges in this example”.

Chapter 16. Stepper Motor Control
- Page 396, “Figure 16-11 shows the activation sequence of half-stepping: \( \bar{A}B, A, AB, B, A, \bar{A}, \bar{A}, AB, \) and \( B \).” should read as “Figure 16-11 shows the activation sequence of half-stepping: \( \bar{A}B, A, AB, B, \bar{A}, \bar{A}, AB, \) and \( B \).”
- Page 400, in the program, “CCR_MicroSteping” should be “CCR_MicroStepping”.

Chapter 17. Liquid-crystal Display (LCD)
- Page 415, “For example, the ASCII value of letter ‘A’ is \( 0x40 \)” should read as “For example, the ASCII value of letter ‘A’ is \( 0x41 \)”.

Chapter 18. Real-time Clock (RTC)

Chapter 19. Direct Memory Access (DMA)
- Page 442, in Example 19-1, “DMAChannel1_IRQHandler” should be “DMA1_Channel1_IRQHandler”.

Chapter 20. Analog-to-Digital Converter

Chapter 21. Digital-to-Analog Converter

Chapter 22. Serial Communication Protocols

Chapter 23. Multitasking

Chapter 24. Digital Signal Processing