Typos in "Game Theory" by Maschler, Solan and Zamir

Chapter 4

- 1. On page 120, Case 2, line 6: $\max_{1 \le l \le L} u_i^l(s^{*l})$ should be $\max_{1 \le l \le L} u_{i_0}^l(s^{*l})$.
- 2. On page 120, Case 2, line 7: $s_i^{\ast l}$ should be $s_{i_0}^{\ast l}.$
- 3. On page 120, Equation (4.69), the second term from the right should be $u_{i_0}^{l_0}(s^{*l_0})$ (and not $u_i^{l_0}(s^{*l_0})$)

Chapter 5

1. On page 207, Equation (5.154) should read:

$$\left\{ (y, 1 - x, 1 + 2xy) \colon 0 \le x, y \le 1, xy \le \frac{1}{2} \right\}.$$

Chapter 6

1. On page 234, Equation (6.53) should read

$$\rho_i(x; b_i) = \prod_{l=1}^{L_i^x} \frac{\sum_{s_i \in S_i^*(x_i^{l,a_l})} \sigma_i(s_i)}{\sum_{s_i \in S_i^*(x_i^l)} \sigma_i(s_i)}.$$

Equation (6.54) should read

$$\sum_{s_i \in S_i^*(x_i^{l,a_l})} \sigma_i(s_i) = \sum_{s_i \in S_i^*(x_i^{l+1})} \sigma_i(s_i).$$
(1)

2. On Page 220, Example 6.1, Figure 6.1: In this figure, there appear U^1 , U^1 , and U^2 (from left to right). These three terms should be (again, from left to right): $U^1_{_{\rm I}}$, $U^2_{_{\rm I}}$.

Chapter 7

 On pages 272-273 there are few typos in Example 7.38. In Figure 7.16, the vertex x₁ is an information set, denoted U¹_I, information set U¹_I should be renamed U²_I, and information set U²_I should be renamed U³_I. Three lines after Equation (7.29), change U¹_I to U²_I. In Equation (7.27), change U¹_I to U²_I. In the paragraph that follows Equation (7.27), change U¹_I to U²_I (three times) and U²_I to U³_I (four times).

Chapter 12

- 1. On page 489, In Equations (12.106) and (12.107), change "0" to "(0)" (that is, add parentheses around "0" in both equations).
- 2. On page 502, add the word "monotonically" before the word "nondecreasing" on the fourth line before Theorem 12.58 and on the first line of the statement of Theorem 12.58.
- 3. On page 512, Exercise 12.19.
 - Part (c): Change the sentence after Equation (12.198) to read as follows: The expected payment of buyer 1 with private value $v_1 \in (0, 1]$ is given by $F_Y(v_1)\mathbf{E}[\beta(W) \mid Y \leq v_1]$. Using the Revenue Equivalence Theorem conclude from this that.
 - Part (f): change this part to the following: What are the conditions that the density function f_1 should satisfy to ensure that the strategy β satisfies the conditions of Theorem 12.23 on page 478?
 - Part (g): Do the computations done so far show that the strategy β is a symmetric equilibrium, or should this issue be checked directly?
 - Throughout the exercise change f_1 to f, F_1 to F, and F_i to F (in the last two lines before part (a) and in Equations (12.197), (12.198), (12.199), (12.200), and (12.201)).
- 4. On page 514, Exercise 12.27, second line, remove the words "and uniformly distributed over [0, 1]".

5. On page 516, delete Exercises 12.38 and 12.39.

Chapter 14

- 1. On page 585, Corollary 14.20, second line, it should be $q \in \Delta(\mathcal{J})$.
- 2. On Page 591, line 6 from bottom, "game with perfect information" should be "game with perfect recall".

Chapter 16

- On page 676, Figure 16.4, the point $(0, \frac{7}{2}, \frac{7}{2})$ should be $(\frac{7}{2}, 0, \frac{7}{2})$. On the right-hand half of the figure, one should swap (7, 0, 0) with (0, 0, 7).
- On page 677, Figures 16.6 and 16.7 are fine but they are inconsistent with Figures 16.4 and 16.5 on page 676. To make them consistent, put (0,7,0) on the bottom-left vertex of the triangle, put (7,0,0) on the bottom-right vertex, and put (0,0,7) on the top vertex. Once this is done, change $(\frac{7}{2}, \frac{7}{2}, 0)$ to $(\frac{7}{2}, 0, \frac{7}{2})$, and change (1,3,3) to (3,3,1).

Chapter 17

- On page 691, line 7, it should be $a\mathcal{C}(N; v) + b \subseteq \mathcal{C}(N; u)$.
- On page 691, line 11, it should be $\frac{1}{a}\mathcal{C}(N;u) \frac{b}{a} \subseteq \mathcal{C}(N;v)$.
- On page 691, line 12, it should be $\mathcal{C}(N; v) \subseteq a\mathcal{C}(N; v) + b$.
- On page 695, Equation (17.34) replace $\delta_{\{1,3\}}$ with $\delta_{\{2,3\}}$.
- On page 703, Definition 17.21, in the second line replace $i \in N$ with $i \in S$.
- On page 705, third line of the proof of Theorem 17.27, change "imputation" to "allocation".

• On page 711, the highlighted equation before Equation (17.91) should read

$$\sum_{T \subseteq N} \gamma_T \chi^T = \sum_{T \subseteq N} \alpha_T \chi^T + \sum_{T \subseteq N} \beta_T \chi^T = x + y$$

- On page 716, three lines above Definition 17.49: change $\varphi(\{i, j\}, w_{\{i, j\}}^x)$ to $\varphi(\{i, j\}; w_{\{i, j\}}^x)$ (semicolon).
- On page 716, Equation (17.117) should read (semicolon):

$$(x_i, x_j) \in \mathcal{C}(\{i, j\}; w_{\{i, j\}}^x)$$

- On page 717, line 4, change $(\{i, j\}, w^x_{\{i, j\}})$ to $\{i, j\}; w^x_{\{i, j\}})$ (semicolon).
- On page 739, Equation (17.197) should read:

$$(v(1), v(N) - v(1) - v(3), v(3)).$$

Chapter 19

• On page 787, Theorem 19.14: This theorem should read:

"Let (N; v) be a coalitional game, let \mathcal{B} be a coalitional structure, let k and l be two players in the same coalition in \mathcal{B} , and let x be an imputation. If (C, y) is a justified objection of player k against player l at x, and if ..."

Chapter 22

• Page 907, Exercise 22.6: Remove part (c). Part (b) should read: In this part we show that the claim in Part (a) cannot be generalized to more than two matchings; that is, it is not true that for every three matchings there are preference relations for which these three matchings are stable. Suppose that the set of men is $M = \{X, Y, Z, W\}$ and the set of women is $\{x, y, z, w\}$. Prove that there are no preference relations to the set of men and the set of women for which the following three matchings

are stable:

$$A_1: Y - w, Z - z, W - y, X - x,$$
 (2)

$$A_2: \quad Z - w, W - z, Y - y, X - x,$$
 (3)

$$A_3: X - w, Z - z, Y - y, W - x.$$
 (4)

• Page 908, Exercise 22.15: Remove the words "Who is the unlucky one?".

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