## An Introduction to Time Series Modeling, 2nd ed by Andreas Jakobsson

## Errata: 180105

Below is a list of corrections/typos found so far:

• p. 33, equation (2.55) should read

$$\mathbf{R}_{\mathbf{z},\mathbf{z}} = \left[ \begin{array}{cc} \mathbf{R}_{\mathbf{x},\mathbf{x}} & \mathbf{R}_{\mathbf{x},\mathbf{y}} \\ \mathbf{R}_{\mathbf{y},\mathbf{x}} & \mathbf{R}_{\mathbf{y},\mathbf{y}} \end{array} \right]$$

- p. 39, the definition of  $r_y(k) \equiv C\{y_t, y_{t-k}\}$  should not contain a \*; see the definition in (2.9). This problem also occurs in equations (3.6), (7.3), (7.6), in the text just below (7.6), (7.16), and (7.20).
- p. 145, eq. (4.85) is missing a  $\nabla$ . It should read:  $w_t = A(z)\nabla x_t$ .
- p. 223, eq. (6.2) should also contain an intercept c, i.e.,

$$\hat{y}_{t+k|t} = \sum_{\ell=0}^{n} w_{\ell} y_{t-\ell} + \epsilon$$

• p. 224, eq. (6.14) and (6.15) are missing minus signs. They should be

$$w_{2} = -\frac{\rho_{y}(1)}{1 - \rho_{y}^{2}(1)}$$
$$\hat{y}_{3|y_{1},y_{2}} = -\frac{c_{1}^{2}}{1 + c_{1}^{2} + c_{1}^{4}}y_{1} - \frac{c_{1} + c_{1}^{3}}{1 + c_{1}^{2} + c_{1}^{4}}y_{2}$$

• p. 301, eq. (8.148) is missing a minus sign. It should read:

$$\mathbf{C}_{t+2|t} = \begin{bmatrix} -\hat{\mathbf{y}}_{t+1|t} & -y_t & \dots & -y_{t-4} & 0 & e_t & e_{t-1} \\ u_{t+2} & u_{t+1} & u_t & u_{t-2} & u_{t-3} \end{bmatrix}$$

- p. 338, the first sentence in solution 4.4 should be: The process  $\nabla_s x_t$  is stationary with the autocovariance  $r_y(\tau)$ .
- p. 340,  $\hat{a}$  should be

$$\hat{a} = D\left\{ \left( (\sum t_k^2) s_1 - (\sum s_k t_k) t_1 \right) y_1 + \ldots + \left( (\sum t_k^2) s_N - (\sum s_k t_k) t_N \right) y_N \right\}$$

- p. 359, Solution 7.2, to polynomial should be  $1 1.4z^{-1} + 0.76z^{-2}$ .
- p. 369, Solution 8.8, the last two equations should read

$$\mathbf{K}_{t} = \mathbf{P}_{t}\mathbf{x}_{t} \left(\mathbf{x}_{t}^{T}\mathbf{P}_{t}\mathbf{x}_{t} + \sigma_{e}^{2}\right)^{-1}$$
$$\mathbf{P}_{t+1} = \phi \left(\mathbf{I} - \mathbf{K}_{t}\mathbf{x}_{t}^{T}\right)\mathbf{P}_{t}\phi^{T} + \mathbf{R}_{v} = \phi^{2} \left(\mathbf{I} - \mathbf{K}_{t}\mathbf{x}_{t}^{T}\right)\mathbf{P}_{t} + \mathbf{R}_{v}$$