

CORRECTIONS FOR
ESTIMATORS FOR THE PARAMETERS OF
A FINITE MIXTURE OF DISTRIBUTIONS

KEEWHAN CHOI

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(b: From the bottom)			
Page	Line	Old	New
107	2b	g	\mathcal{G}
108	9	g	\mathcal{G}
	10		
	8b		
	11b		
109	9	$\left\{ \begin{array}{l} F'_i(x, \theta_i) \\ F''_j(x, \theta_j) \end{array} \right.$	$F'(x, \theta_j)$
	4b		$F''(x, \theta_j)$
109	6b	set of functions	set of <i>bounded</i> functions
110	8b	$\log(n/\sqrt{n})$	$\sqrt{\frac{\log \log n}{n}}$
111	2	$\log(n/\sqrt{n})$	$\sqrt{\frac{\log \log n}{n}}$
112	10b	$\frac{1}{n} \sum_{p=1}^n M_{ij}^{(q)}(x_p)$	$\frac{1}{n} \sum_a \sum_{p=1}^n \xi_{ij} M_{ij}^{(q)}(x_p)$
	9b	$[M + \rho_n]$	M
	8b	Insert after J_{0ij} :	$\left\{ \begin{array}{l} \text{and } \xi_{ij} \leq 1 \text{ for all } i, j, \xi' < 1 \\ \text{and } M \text{ is a bound of } M_{ij}^{(q)}(x). \end{array} \right.$
	8b	Delete	$\left\{ \begin{array}{l} M = E_a M_{ij}^{(q)}(X) \text{ and} \\ \rho_n = M - \frac{1}{n} \sum_{p=1}^n M_{ij}^{(q)}(x_p) \end{array} \right.$
	5b	$\subset g$	$\subset \mathcal{G}$

114 10b

Therefore $\ddot{S}_n(\tilde{G}) \rightarrow J_0$

$$\leq |S_n(\tilde{G}) - S_n(G_0)| + |S_n(G_0) - J_0|.$$

Since $S_n(G)$ is a continuous function of G and \tilde{G} is a convex combination of G_n and G_0

$$|S_n(\tilde{G}) - S_n(G_0)| \rightarrow 0 \text{ and}$$

$$|S_n(G_0) - J_0| \rightarrow 0$$

by (i). Hence $|S_n(\tilde{G}) - J_0| \rightarrow 0$.

115 2

Replace the entire line

By definition $\ddot{S}_n(\tilde{G})$ is bounded.
Hence

$$g_1 \left| \sup_x P_G(x) - F_n(x) \right| \leq \frac{1}{n} \sum_{i=1}^n \frac{\partial F(x, \theta_i)}{\partial \theta_1}$$

$$g_1 \sup_x |P_G(x) - F_n(x)| \leq C,$$

where C is a bound of $\frac{\partial F(x, \theta_i)}{\partial \theta_1}$.

8 }
9 } deletes the 2 lines

$$11 \quad \sup |P_G(x)| < \lambda(n) \quad \sup |P_G(x) - F_n(x)| < \lambda(n)$$

$$\lambda(n) = \log n \quad \lambda(n) = \sqrt{\log \log n}$$

12 Delete "for $\varepsilon > 0$ "

$$13 \quad \left\{ E \left| \frac{\partial F(x, \theta_1)}{\partial \theta_1} \right| + \varepsilon \right\} \log n$$

$$g_1 C_1 \sqrt{\log \log n}$$

where C_1 is a bound for $\frac{\partial F(x, \theta_1)}{\partial \theta_1}$.

$$13 \quad \log n \quad \sqrt{\log \log n}$$

$$14 \quad \left. \max \left\{ E_0 \left| \frac{\partial F(x, \theta_j)}{\partial \theta_j} \right| + \varepsilon, j=1, 2, \dots, m \right\} \right\}$$

$$15 \quad \max_j C_j$$

$$16 \quad \log n \quad \sqrt{\log \log n}$$