Online Appendix to You Are as You Type: Investigating the Influence of Timestamp Accuracy on the Robustness of Keystroke Biometrics

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I. FINGERPRINTING MITIGATION (SECTION IV-B)

TABLE V
AVERAGE EQUAL ERROR RATES (%) FOR FIXED-TEXT KEYSTROKE DYNAMICS WITH LIMITED TIMESTAMP PRECISION DUE TO VARIOUS SETTINGS OF THE FIREFOX RESIST FINGERPRINTING (RFP) FUNCTION (CF. SECTION IV-B).

RFP setting [ms]	Mod - Mod				Mod - Orig				Orig - Mod			
	Euc	Man	ManS	Mah	Euc	Man	ManS	Mah	Euc	Man	ManS	Mah
16.667	17	16	11	13	17	15	10	08	17	16	11	14
20	17	16	11	11	17	15	10	10	17	16	12	12
40	17	16	13	13	17	14	09	09	18	18	19	19
60	18	17	15	16	16	13	07	08	19	20	29	50
80	18	18	17	17	15	11	07	07	20	24	39	39
100	18	19	18	17	14	10	06	08	22	28	50	73
120	18	17	17	17	13	08	05	05	23	30	55	55
140	19	19	18	18	12	06	04	06	27	35	64	83
160	20	20	19	19	11	05	03	03	29	39	70	70
180	21	21	20	20	10	05	03	06	31	43	74	89
200	22	21	20	20	10	04	03	03	33	46	77	91

Mod - Mod: Modified data for enrollment and testing
Mod-Orig: Modified data for enrollment, original data for testing
Orig-Mod: Original data for enrollment, modified data for testing
Euc: Euclidean, **Man**: Manhattan, **ManS**: Manhattan Scaled, **Mah**: Mahalanobis

TABLE VI
ERROR RATES (%) FOR FREE-TEXT KEYSTROKE DYNAMICS WITH LIMITED TIMESTAMP PRECISION DUE TO VARIOUS SETTINGS OF THE FIREFOX RESIST FINGERPRINTING (RFP) FUNCTION (CF. SECTION IV-B).

RFP setting [ms]	Mod - Mod			Mod -Orig			Orig - Mod		
	FAR	FRR	McR	FAR	FRR	McR	FAR	FRR	McR
16.667	0.00	5.95	2.38	0.00	4.29	1.90	0.00	5.24	2.14
20	0.00	7.38	2.62	0.00	4.29	2.14	0.00	6.90	2.38
40	0.01	9.05	4.29	0.01	4.29	2.86	0.00	9.29	3.10
60	0.00	12.62	7.14	0.01	5.00	3.33	0.00	17.14	3.57
80	0.00	14.29	8.33	0.01	4.52	4.05	0.00	26.19	4.29
100	0.00	17.62	10.71	0.04	5.95	5.48	0.00	43.10	5.24
120	0.01	22.62	15.24	0.04	7.14	6.90	0.00	60.71	8.81
140	0.00	24.52	16.90	0.13	7.86	7.62	0.00	61.19	6.19
160	0.03	26.67	18.57	0.19	10.48	10.48	0.00	79.05	8.10
180	0.03	26.67	23.10	0.23	10.48	15.24	0.00	88.33	13.10
200	0.03	32.14	24.29	0.30	16.67	16.67	0.00	90.24	13.33

Mod - Mod: Modified data for enrollment and testing
Mod-Orig: Modified data for enrollment, original data for testing
Orig-Mod: Original data for enrollment, modified data for testing
FAR: False Acceptance Rate, **FRR**: False Rejection Rate
McR: Misclassification Rate