

WORKSHOP ON HUMAN INTERACTIVE PROOFS

January 9-11, 2002
Xerox PARC, Palo Alto, CA

Sponsored by Xerox and the NSF Aladdin Center at CMU SCS

Organizers: Manuel Blum, CS Dept, CMU

Henry Baird, DID Area, Xerox PARC

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WORKSHOP PROGRAM

Wednesday, January 9, 2002

8:00 am			<i>continental breakfast</i>	60 min
1. Introduction				
9:00 am	1.1	HENRY BAIRD	<i>Welcome to PARC</i>	5 min
9:05 am	1.2	MANUEL BLUM, LENORE BLUM, AND GUY BLELOCH	<i>Introduction to the Workshop and the NSF ALADDIN Center</i>	10 min p. 12
9:15 am	1.3	KRIS POPAT	<i>Workshop logistics</i>	5 min
2. Overview				
9:20 am	2.1	MANUEL BLUM, LUIS VON AHN, AND NICK HOPPER	<i>HIPs: CAPTCHAs, HUMANOIDs</i>	60 min p. 13-24
3. The Challenges				
10:20 am	3.1	UDI MANBER	<i>Web Exploits</i>	20 min p. 25
10:40 am	3.2	ROBERT SLOAN	<i>The Research Challenges</i>	10 min p. 26-28
10:50 am			<i>coffee/juice break</i>	15 min
4. Systems, Prototypes, Designs				
11:05 am	4.1	ANDREI BRODER	<i>AddUrl</i>	15 min p. 29
11:20 am	4.2	DAN LOPRESTI	<i>Spoken Language HIPs</i>	15 min p. 30-34
11:35 am	4.3	NANCY CHAN	<i>Sound Oriented CAPTCHA</i>	10 min p. 35

11:45 am	4.4	KE YANG	<i>Chinese CAPTCHA</i>	10 min	p. 36
11:55 am			<i>lunch, PARC Cafeteria</i>	60 min	
12:55 pm	4.5	CHARLES BENNETT	<i>Time-Bracketed Video Authentication</i>	15 min	p. 37-38
1:10 pm	4.6	RICHARD FATEMAN, AL-LISON COATES, KRIS POPAT	<i>Pessimial Print CAPTCHA</i>	20 min	p. 39-41
1:30 pm	4.7	DOUG TYGAR, RACHNA DHAMIJA, ALMA WHITTEN	<i>Human Factors and Security</i>	60 min	p. 42-50
2:30 pm			<i>coffee/juice break</i>	15 min	

5. Formulations and Formal Models

2:45 pm	5.1	MONI NAOR	<i>Human, Computers and Cryptography</i>	20 min	p. 51-54
3:05 pm	5.2	ARI JUELS	<i>At the Juncture of Cryptography and Humanity</i>	20 min	p. 55-58
3:25 pm	5.3	MONICA CHEW	<i>Visual Illusions</i>	10 min	p. 59-60
3:35 pm	5.4	ADRIAN PERRIG AND DAWN SONG	<i>User Authentication: Reflex instead of Reflection</i>	20 min	p. 61-63
3:55 pm	5.5	STUART HABER	<i>HIPs and DRM/DPM Systems</i>	15 min	p. 64
4:10 pm			<i>coffee/juice break</i>	15 min	
4:25 pm	5.6	JOHN LANGFORD	<i>CAPTCHA Boosting</i>	15 min	p. 13-19
4:40 pm	5.7	BRIGHTEN GODFREY	<i>Text Oriented CAPTCHA</i>	10 min	p. 65-67

4:50 pm 5.8 **BARTOSZ PRZYDATEK** *(Im)Possibility of Text-Only CAPTCHA* 20 min p. 68

5:10 pm *adjourn*

Thursday, January 10, 2002

8:00 am *continental breakfast* 60 min

6. Plenary Talk

9:00 am 6.1 **JOHN MCCARTHY** *AI Frontiers: Ability-based CAPTCHAs (no abstract)* 30 min

7. Visual Ability and CAPTCHAs

9:30 am 7.1 **GEORGE NAGY** *Rate of Progress in Machine Reading* 20 min p. 69

9:50 am 7.2 **A. LAWRENCE SPITZ** *A Feeble Classifier in Strong Contexts* 20 min p. 70-73

10:10 am 7.3 **HENRY BAIRD** *Mapping OCR Competency* 20 min p. 74-77

10:30 am *coffee/juice break* 15 min

10:45 am 7.4 **KRIS POPAT** *OCR by Document Image Decoding* 20 min p. 78

11:05 am 7.5 **PRATEEK SARKAR** *Distinguishing Users by Ability to Interpret Respond* 15 min p. 79-80

11:20 am 7.6 **TOM BREUEL** *Semantic Cryptography* 10 min p. 82

11:30 am	7.7	DAVID GOLDBERG	<i>On Snoop-Proof Password Systems</i>	10 min	p. 83
11:40 am	7.8	DIRK BALFANTZ AND TOM BERSON	<i>HIP Shots</i>	10 min	p. 84-85
11:50 am			<i>Lunch, PARC Cafeteria</i>	60 min	

8. Auditory HumanOIDs = PhonOIDs

12:50 pm	8.1	RACHEL RUE	<i>Eighty-Six bits of Memory Magic</i>	15 min	p. 86
1:05 pm	8.2	MANUEL BLUM	<i>PhonOID Protocol Class #81</i>	15 min	p. 87

9. Computer Vision and CAPTCHAs

1:20 pm	9.1	JITENDRA MALIK	<i>Visual Shape Recognition and CAPTCHAs</i>	30 min	p. 88
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10. Working Group Discussions

1:50 pm			<i>Select topics</i>	15 min	
2:05 pm			<i>Break out into working groups</i>	160 min	
4:45 pm			<i>Read-out from working groups</i>	40 min	
5:25 pm			<i>adjourn</i>		

Friday, January 11, 2002

8:00 am			<i>continental breakfast</i>	60 min	
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9:00 am		<i>Break</i>	35 min
11. Readouts of Working Groups			
9:35 am		<i>Theory</i>	10 min
9:45 am		<i>Performance</i>	10 min
9:55 am		<i>Vision</i>	10 min
10:05 am		<i>Applications</i>	10 min
10:15 am		<i>Break</i>	15 min
12. Panel Discussion: The Way Forward			
10:30 am	12.1	HENRY BAIRD	12 min p. 10
10:42 am	12.2	UDI MANBER	12 min p. 10
10:54 am	12.3	DOUG TYGAR	12 min p. 10
11:06 am	12.4	MANUEL BLUM	12 min p. 10
11:18 am		<i>General Discussion: Open Problems, Sound Engineering Methods</i>	60 min
13. Planning Session			
12:18 pm		<i>Proposals for Future Workshop, Activities</i>	60 min
1:18 pm		<i>adjourn</i>	