

# Herbert Bos

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/564302/publications.pdf>

Version: 2024-02-01

123  
papers

3,703  
citations

623699

14  
h-index

501174

28  
g-index

125  
all docs

125  
docs citations

125  
times ranked

1556  
citing authors

#	ARTICLE	IF	CITATIONS
1	On the effectiveness of same-domain memory deduplication. , 2022, , .		2
2	PIBE: practical kernel control-flow hardening with profile-guided indirect branch elimination. , 2021, , .		2
3	FIRestarter: Practical Software Crash Recovery with Targeted Library-level Fault Injection. , 2021, , .		1
4	NetCAT: Practical Cache Attacks from the Network. , 2020, , .		20
5	Benchmarking Flaws Undermine Security Research. IEEE Security and Privacy, 2020, 18, 48-57.	1.2	3
6	TagBleed: Breaking KASLR on the Isolated Kernel Address Space using Tagged TLBs. , 2020, , .		13
7	BinRec. , 2020, , .		21
8	SecurePay: Strengthening Two-Factor Authentication for Arbitrary Transactions. , 2020, , .		3
9	PANDAcap. , 2020, , .		1
10	Speculative Probing. , 2020, , .		15
11	ProbeGuard. , 2019, , .		6
12	kMVX. , 2019, , .		16
13	RIDL: Rogue In-Flight Data Load. , 2019, , .		141
14	VPS. , 2019, , .		2
15	Delta pointers. , 2018, , .		25
16	Now You See Me. , 2018, , .		4
17	On the Effectiveness of Code Normalization for Function Identification. , 2018, , .		1
18	TIFF. , 2018, , .		27

#	ARTICLE	IF	CITATIONS
19	Defeating Software Mitigations Against Rowhammer: A Surgical Precision Hammer. Lecture Notes in Computer Science, 2018, , 47-66.	1.3	30
20	GuardION: Practical Mitigation of DMA-Based Rowhammer Attacks on ARM. Lecture Notes in Computer Science, 2018, , 92-113.	1.3	33
21	Position-Independent Code Reuse: On the Effectiveness of ASLR in the Absence of Information Disclosure. , 2018, , .		21
22	ASLR on the Line: Practical Cache Attacks on the MMU. , 2017, , .		113
23	No Need to Hide. , 2017, , .		74
24	PROV 2R. ACM Transactions on Internet Technology, 2017, 17, 1-24.	4.4	4
25	Compiler-Agnostic Function Detection in Binaries. , 2017, , .		55
26	Secure Page Fusion with VUision. , 2017, , .		14
27	CodeArmor: Virtualizing the Code Space to Counter Disclosure Attacks. , 2017, , .		30
28	The Dynamics of Innocent Flesh on the Bone. , 2017, , .		34
29	Towards Automated Discovery of Crash-Resistant Primitives in Binary Executables. , 2017, , .		10
30	Fast and Generic Metadata Management with Mid-Fat Pointers. , 2017, , .		5
31	DSIbin: Identifying dynamic data structures in C/C++ binaries. , 2017, , .		6
32	RevAnC. , 2017, , .		7
33	How Anywhere Computing Just Killed Your Phone-Based Two-Factor Authentication. Lecture Notes in Computer Science, 2017, , 405-421.	1.3	19
34	JTR: A Binary Solution for Switch-Case Recovery. Lecture Notes in Computer Science, 2017, , 177-195.	1.3	2
35	A NEaT Design for Reliable and Scalable Network Stacks. , 2016, , .		1
36	TypeSan. , 2016, , .		40

#	ARTICLE	IF	CITATIONS
37	Secure and Efficient Multi-Variant Execution Using Hardware-Assisted Process Virtualization. , 2016, , .		27
38	Peeking into the Past: Efficient Checkpoint-Assisted Time-Traveling Debugging. , 2016, , .		7
39	METAlloc. , 2016, , .		9
40	Dedup Est Machina: Memory Deduplication as an Advanced Exploitation Vector. , 2016, , .		108
41	OSIRIS: Efficient and Consistent Recovery of Compartmentalized Operating Systems. , 2016, , .		6
42	A Tough Call: Mitigating Advanced Code-Reuse Attacks at the Binary Level. , 2016, , .		93
43	IFuzzer: An Evolutionary Interpreter Fuzzer Using Genetic Programming. Lecture Notes in Computer Science, 2016, , 581-601.	1.3	57
44	Slick. , 2016, , .		5
45	Drammer. , 2016, , .		166
46	Binary Rejuvenation: Applications and Challenges. IEEE Security and Privacy, 2016, 14, 68-71.	1.2	4
47	On the detection of custom memory allocators in C binaries. Empirical Software Engineering, 2016, 21, 753-777.	3.9	7
48	Scalable data structure detection and classification for C/C++ binaries. Empirical Software Engineering, 2016, 21, 778-810.	3.9	10
49	Trade-Offs in Automatic Provenance Capture. Lecture Notes in Computer Science, 2016, , 29-41.	1.3	7
50	Software that Meets Its Intent. Lecture Notes in Computer Science, 2016, , 609-625.	1.3	3
51	Speculative Memory Checkpointing. , 2015, , .		11
52	StackArmor: Comprehensive Protection from Stack-based Memory Error Vulnerabilities for Binaries. , 2015, , .		58
53	Parallax: Implicit Code Integrity Verification Using Return-Oriented Programming. , 2015, , .		14
54	Reliable Recon in Adversarial Peer-to-Peer Botnets. , 2015, , .		18

#	ARTICLE	IF	CITATIONS
55	Practical Context-Sensitive CFL. , 2015, , .		115
56	Lightweight Memory Checkpointing. , 2015, , .		14
57	ShrinkWrap. , 2015, , .		29
58	PIE. , 2015, , .		20
59	The BORG. , 2015, , .		40
60	Looking Inside the Black-Box: Capturing Data Provenance Using Dynamic Instrumentation. Lecture Notes in Computer Science, 2015, , 155-167.	1.3	21
61	â€œNice Boots!â€- A Large-Scale Analysis of Bootkits and New Ways to Stop Them. Lecture Notes in Computer Science, 2015, , 25-45.	1.3	5
62	Framing Signals - A Return to Portable Shellcode. , 2014, , .		55
63	Out of Control: Overcoming Control-Flow Integrity. , 2014, , .		239
64	On measuring the impact of DDoS botnets. , 2014, , .		24
65	Instruction-Level Steganography for Covert Trigger-Based Malware. Lecture Notes in Computer Science, 2014, , 41-50.	1.3	13
66	I Sensed It Was You: Authenticating Mobile Users with Sensor-Enhanced Keystroke Dynamics. Lecture Notes in Computer Science, 2014, , 92-111.	1.3	53
67	Data Structure Archaeology: Scrape Away the Dirt and Glue Back the Pieces!. Lecture Notes in Computer Science, 2014, , 1-20.	1.3	2
68	Facilitating Trust on Data through Provenance. Lecture Notes in Computer Science, 2014, , 220-221.	1.3	1
69	Techniques for efficient in-memory checkpointing. Operating Systems Review (ACM), 2014, 48, 21-25.	1.9	1
70	Who allocated my memory? Detecting custom memory allocators in C binaries. , 2013, , .		16
71	Highly resilient peer-to-peer botnets are here: An analysis of Gameover Zeus. , 2013, , .		68
72	MemPick: High-level data structure detection in C/C&#x002B;&#x002B; binaries. , 2013, , .		6

#	ARTICLE	IF	CITATIONS
73	MemBrush: A practical tool to detect custom memory allocators in C binaries. , 2013, , .		2
74	MemPick: A tool for data structure detection. , 2013, , .		8
75	Techniques for efficient in-memory checkpointing. , 2013, , .		7
76	SoK: P2PWNEED - Modeling and Evaluating the Resilience of Peer-to-Peer Botnets. , 2013, , .		116
77	Large-Scale Analysis of Malware Downloaders. Lecture Notes in Computer Science, 2013, , 42-61.	1.3	33
78	System-Level Support for Intrusion Recovery. Lecture Notes in Computer Science, 2013, , 144-163.	1.3	6
79	Prudent Practices for Designing Malware Experiments: Status Quo and Outlook. , 2012, , .		121
80	Keep net working - on a dependable and fast networking stack. , 2012, , .		3
81	Memory Errors: The Past, the Present, and the Future. Lecture Notes in Computer Science, 2012, , 86-106.	1.3	81
82	On Botnets That Use DNS for Command and Control. , 2011, , .		71
83	Systems Security at VU University Amsterdam. , 2011, , .		1
84	Sandnet. , 2011, , .		62
85	Application-Tailored I/O with Streamline. ACM Transactions on Computer Systems, 2011, 29, 1-33.	0.8	13
86	Minemu: The World's Fastest Taint Tracker. Lecture Notes in Computer Science, 2011, , 1-20.	1.3	66
87	DDE. , 2010, , .		8
88	Pointer tainting still pointless. Operating Systems Review (ACM), 2010, 44, 88-92.	1.9	9
89	Paranoid Android. , 2010, , .		247
90	CacheCard. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
91	Pointless tainting?. , 2009, , .		80
92	Fault isolation for device drivers. , 2009, , .		42
93	Mapping and Synchronizing Streaming Applications on Cell Processors. Lecture Notes in Computer Science, 2009, , 216-230.	1.3	6
94	Future Threats to Future Trust. , 2009, , 49-54.		7
95	Tales from the Crypt: Fingerprinting Attacks on Encrypted Channels by Way of Retainting. Lecture Notes in Electrical Engineering, 2009, , 1-20.	0.4	0
96	Countering IPC Threats in Multiserver Operating Systems (A Fundamental Requirement for) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 T		
97	Model-T: Rethinking the OS for terabit speeds. , 2008, , .		4
98	Safe execution of untrusted applications on embedded network processors. International Journal of Embedded Systems, 2008, 3, 294.	0.3	2
99	PipesFS. Operating Systems Review (ACM), 2008, 42, 55-63.	1.9	14
100	Eudaemon. Operating Systems Review (ACM), 2008, 42, 287-299.	1.9	5
101	Eudaemon. , 2008, , .		13
102	Ruler. , 2007, , .		11
103	A Component-based Coordination Language for Efficient Reconfigurable Streaming Applications. Parallel Processing (ICPP), Proceedings of the International Symposium, 2007, , .	0.0	3
104	The Age of Data: Pinpointing Guilty Bytes in Polymorphic Buffer Overflows on Heap or Stack. , 2007, , .		13
105	Failure Resilience for Device Drivers. , 2007, , .		72
106	SweetBait: Zero-hour worm detection and containment using low- and high-interaction honeypots. Computer Networks, 2007, 51, 1256-1274.	5.1	38
107	The Age of Data: Pinpointing Guilty Bytes in Polymorphic Buffer Overflows on Heap or Stack. Proceedings of the Computer Security Applications Conference, 2007, , .	0.0	0
108	Reorganizing UNIX for Reliability. Lecture Notes in Computer Science, 2006, , 81-94.	1.3	10

#	ARTICLE	IF	CITATIONS
109	Construction of a Highly Dependable Operating System. , 2006, , .		40
110	Argos. , 2006, , .		127
111	File size distribution on UNIX systems. Operating Systems Review (ACM), 2006, 40, 100-104.	1.9	32
112	Argos. Operating Systems Review (ACM), 2006, 40, 15-27.	1.9	62
113	Dynamically extending the Corral with native code for high-speed packet processing. Computer Networks, 2006, 50, 2444-2461.	5.1	0
114	MINIX 3. Operating Systems Review (ACM), 2006, 40, 80-89.	1.9	92
115	SafeCard: A Gigabit IPS on the Network Card. Lecture Notes in Computer Science, 2006, , 311-330.	1.3	19
116	Supporting Reconfigurable Parallel Multimedia Applications. Lecture Notes in Computer Science, 2006, , 765-776.	1.3	3
117	FPL-3: Towards Language Support for Distributed Packet Processing. Lecture Notes in Computer Science, 2005, , 743-755.	1.3	7
118	OS support for multi-gigabit networking. , 2005, , .		0
119	On the feasibility of using network processors for DNA queries. , 2005, , 197-218.		2
120	HOKES/POKES: Light-Weight Resource Sharing. Lecture Notes in Computer Science, 2003, , 51-66.	1.3	2
121	A perspective on how ATM lost control. Computer Communication Review, 2002, 32, 25-28.	1.8	0
122	Open Extensible Network Control. Journal of Network and Systems Management, 2000, 8, 73-97.	4.9	2
123	Efficient reservations in open ATM network control using on-line measurements. International Journal of Communication Systems, 1998, 11, 247-258.	2.5	1