

A PC-based CAD system for training digital test

Ubar, Raimund-Johannes; Buldas, Ahto; Paomets, Priidu; Raik, Jaan; **Tulit, Viljar** The Fifth EUROCHIP Workshop on VLSI Design Training, 17-18-19 October 1994, Dresden, Germany 1994 / p. 152-157: ill

A semi-formal method for security estimation

Buldas, Ahto; Priisalu, Jaan Databases and information systems : proceedings of the Second International Baltic Workshop : Tallinn, June 12-14, 1996. Volume 1, Research track 1996 / p. 206-212

A VLSI implementation of RSA and IDEA encryption engine

Buldas, Ahto; Põldre, Jüri Proceedings [of the] 15th NORCHIP Conference, Tallinn, 10-11 November 1997 1997 / p. 281-288: ill

Ajatebeldusel on maailmas tulevikku : [küsimustele vastab noore teadlase preemia pälvinud Ahto Buldas]

Sootak, Varje; **Buldas, Ahto** Universitas Tartuensis 2002 / 20. dets., lk. 5 : fot

Ajateplid digitaaldokumentidel

Buldas, Ahto; Lipmaa, Helger Arvutimaailm 1998 / 2, lk. 45-47: ill

Ajateplisüsteemid : avalik loeng 30. mail 2001 TTÜs

Buldas, Ahto Tallinna Tehnikaülikooli aastaraamat 2001 2003 / lk. 308-312

Algoritmid ja diagonaalsed tõestused

Buldas, Ahto Arvutustehnika ja Andmetöötlus 1995 / 1, lk. 5-10

Allkirjad elektroonilistel dokumentidel : väärmatu tõenduse algoritmidest

Buldas, Ahto A & A 2000 / 6, lk. 36-40

An algebraic approach to the structure of graphs

Buldas, Ahto 1999 http://www.ester.ee/record=b1273064*est

Are the current system engineering practices sufficient to meet cyber crime?

Buldas, Ahto; Saarepera, Märt Human Aspects of Information Security, Privacy and Trust : 5th International Conference, HAS 2017 : held as part of HCI International 2017, Vancouver, BC, Canada, July 9–14, 2017 : proceedings 2017 / p. 451-463
https://doi.org/10.1007/978-3-319-58460-7_31 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Attribute evaluation on attack trees with incomplete information

Buldas, Ahto; Gadyatskaya, Olga; **Lenin, Aleksandr; Mauw, Sjouke; Trujillo-Rasua, Roland** Computers & Security 2020 / art. 101630, 17 p. : ill <https://doi.org/10.1016/j.cose.2019.101630> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Attribute evaluation on attack trees with incomplete information : a preprint

Buldas, Ahto; Gadyatskaya, Olga; **Lenin, Aleksandr; Mauw, Sjouke; Trujillo-Rasua, Roland** arXiv.org 2019 / 21 p. : ill
<http://arxiv.org/abs/1812.10754>

Black-box separations and their adaptability to the non-uniform model

Buldas, Ahto; Niitsoo, Margus Information security and privacy : 18th Australasian Conference, ACISP 2013, Brisbane, Australia, July 1-3, 2013 : proceedings 2013 / p. 152-167 https://doi.org/10.1007/978-3-642-39059-3_11 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Blockchain technology: Intrinsic technological and socio-economic barriers: FDSE'2020 Keynote

Buldas, Ahto; Draheim, Dirk; Nagumo, Takehiko; **Vedešin, Anton** Future Data and Security Engineering. Big Data, Security and Privacy, Smart City and Industry 4.0 Applications : 7th International Conference, FDSE 2020, Quy Nhon, Vietnam, November 25–27, 2020 : proceedings 2020 / p. 3-27 https://doi.org/10.1007/978-3-030-63924-2_1 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

A blockchain-assisted hash-based signature scheme

Buldas, Ahto; Laanoja, Risto; Truu, Ahto Secure IT Systems : 23rd Nordic Conference, NordSec 2018, Oslo, Norway, November 28–30, 2018 : proceedings 2018 / p. 138–153 : ill https://doi.org/10.1007/978-3-030-03638-6_9 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Bounded pre-image awareness and the security of hash-tree keyless signatures

Buldas, Ahto; Laanoja, Risto; Laud, Peeter; Truu, Ahto Provable security : 8th International Conference, ProvSec 2014, Hong Kong, China, October 9-10, 2014 : proceedings 2014 / p. 130-145 : ill https://doi.org/10.1007/978-3-319-12475-9_10 [Conference proceeding at Scopus](#) [Article at Scopus](#) [Conference proceeding at WOS](#) [Article at WOS](#)

Comparability graphs and the structure of finite graphs

Buldas, Ahto Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 1996 / 2/3, p. 117-127

Congruence lattice of a graph

Buldas, Ahto Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 1997 / 3, p. 155-170: ill

Does secure time-stamping imply collision-free hash functions

Buldas, Ahto; Jürgenson, Aivo Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kolmanda aastakonverentsi artiklite kogumik : 25.-26. aprill 2008, Voore külalistemaja 2008 / p. 59-63 : ill

Does secure time-stamping imply collision-free hash functions?

Buldas, Ahto; Jürgenson, Aivo Lecture notes in computer science 2007 / p. 138-150

Eesti Vabariigi 2018. aasta teaduspreemia laureaadid TTÜst

Vähi, Kersti; Buldas, Ahto; Kotta, Ülle; Kurnitski, Jarek; Raudla, Ringa Mente et Manu 2018 / lk. 26-27 : portr

<https://www.ttu.ee/ttu-uudised/ajaleht-mente-et-manu/mente-et-manu/> http://www.ester.ee/record=b1242496*est

https://artiklid.elnet.ee/record=b2836028*est

Eestis arendatud plokiahel soovib saada maailmaturu liidriks

Rumm, Hannes Eesti Ekspress 2023 / lk. 30-33 <https://dea.digar.ee/article/eestiekspress/2023/05/10/13.6>

Efficiency bounds for adversary constructions in black-box reductions

Buldas, Ahto; Jürgenson, Aivo; Niitsoo, Margus Information Security and Privacy : 14th Australasian Conference : ACISP 2009 : Brisbane, Australia, July 1-3, 2009 : proceedings 2009 / p. 264-275 https://link.springer.com/chapter/10.1007/978-3-642-02620-1_19

Efficient long-term validation of digital signatures

Ansper, A.; **Buldas, Ahto**; Roos, Meelis; Willemson, Jan Public Key Cryptography : 4th International Workshop on Practice and Theory in Public Key Cryptosystems : PKC 2001 : Cheju Island, Korea, February 13-15, 2001 : proceedings 2001 / p. 13-15

Efficient semantics of parallel and serial models of attack trees = Ründepuude paralleel- ja jadamudelite efektiivsed semantikad

Jürgenson, Aivo 2010 https://www.ester.ee/record=b2604924*est

Electronic signature system with small number of private keys

Buldas, Ahto; Saarepera, Märt 2nd Annual PKI Research Workshop Pre-Proceedings : Gaithersburg, Maryland, USA, April 28-29, 2003 2003 / p. 96-108 https://www.researchgate.net/publication/2869630_Electronic_Signature_System_with_Small_Number_of_Private_Keys

Elektrondokumendid tõendusmaterjalina

Buldas, Ahto Arvutimaailm 1997 / 8, lk. 23-25: ill

Eliminating counterevidence with applications to accountable certificate management

Buldas, Ahto; Laud, Peeter; Lipmaa, Helger Journal of computer security 2002 / 3, p. 273-296 <https://content.iospress.com/articles/journal-of-computer-security/jcs161>

Goodsteini teoreemist

Buldas, Ahto Arvutustehnika ja Andmetöötlus 1995 / 4, lk. 2-6

Graafid

Buldas, Ahto; Laud, Peeter; Villemson, Jan 2003 https://www.ester.ee/record=b1804744*est

Graafid

Buldas, Ahto; Laud, Peeter; Villemson, Jan 2008 https://www.ester.ee/record=b2345899*est

Graafid ja järjestused

Buldas, Ahto Arvutustehnika ja Andmetöötlus 1995 / 2, lk. 2-8: ill

Graphs and lattice varieties

Buldas, Ahto Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 1998 / 2, p. 100-109

Hash-based server-assisted digital signature solutions = Räsifunktsioonidel põhinevad serveri toega digitaalse signeerimise lahendused

Truu, Ahto 2020 <https://digikogu.taltech.ee/et/Item/a972cc4b-53ec-4c82-8de0-b3e941cce345>

Improving the availability of time-stamping services

Ansper, A.; **Buldas, Ahto**; Saarepera, Märt; Willemson, Jan Information Security and Privacy : 6th Australian Conference : ACISP 2001 : Sydney, Australia, July 11-13, 2001 : proceedings 2001 / p. 360-375 https://link.springer.com/chapter/10.1007/3-540-47719-5_29

Infosüsteemide turve

Hanson, Vello; **Buldas, Ahto** 1997 https://www.ester.ee/record=b1059903*est

Infosüsteemide turve

Hanson, Vello; **Buldas, Ahto**; **Praust, Valdo** 1998 https://www.ester.ee/record=b1191671*est

Keyless signature infrastructure and PKI : hash-tree signatures in pre- and post-quantum world

Buldas, Ahto; **Laanoja, Risto**; **Truu, Ahto** International journal of services technology and management 2017 / p. 117-130 : ill <https://doi.org/10.1504/IJSTM.2017.10002708> [Journal metrics at Scopus](#) [Article at Scopus](#)

Keyless signatures' infrastructure: How to build global distributed hash-trees

Buldas, Ahto; Kroonmaa, Andres; **Laanoja, Risto** Secure IT Systems : 18th Nordic Conference, NordSec 2013, Ilulissat, Greenland, October 18-21, 2013, Proceedings 2013 / p. 313 - 320 https://doi.org/10.1007/978-3-642-41488-6_21 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Knowledge-binding commitments with applications in time-stamping

Buldas, Ahto; Laur, Sven Lecture notes in computer science 2007 / p. 150-165 <https://eprint.iacr.org/2007/071>

Krüptoloogia. Miks ja kuidas?

Buldas, Ahto Arvutimaailm 1994 / 3, lk. 14-15

Limiting adversarial budget in quantitative security assessment

Lenin, Aleksandr; **Buldas, Ahto** Decision and Game Theory for Security : 5th International Conference, GameSec 2014, Los Angeles, CA, USA, November 6-7, 2014 : proceedings 2014 / p. 155-174 : ill https://doi.org/10.1007/978-3-319-12601-2_9 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Long term archiving of electronic signatures

Buldas, Ahto; Freudenthal, Margus Baltic ITAMPT review 2004 / 1, p. 69-74 : ill

Long-term secure commitments via extractable-binding commitments

Buldas, Ahto; Geihs, Matthias; Buchmann, Johannes Information Security and Privacy : 22nd Australasian Conference, ACISP 2017, Auckland, New Zealand, July 3-5, 2017 : Proceedings, Part I 2017 / p. 65-81 https://doi.org/10.1007/978-3-319-60055-0_4 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Long-term secure time-stamping using preimage-aware hash functions : (short version)

Buldas, Ahto; Geihs, Matthias; Buchmann, Johannes Provable Security : 11th International Conference, ProvSec 2017, Xi'an, China, October 23-25, 2017 : proceedings 2017 / p. 251-260 : ill http://doi.org/10.1007/978-3-319-68637-0_15 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Loogikaskeemid ja binaardiagrammid

Buldas, Ahto Aastaraamat 1994 - 1996 / Eesti Matemaatika Selts 1999 / lk. 6-11

Mikroarvuti plastkaardis

Buldas, Ahto; Laksper, Enn; Priisalu, Jaan Arvutimaailm 1994 / 4, lk. 52-55; 5, lk. 28-31; 6, lk. 42-43; 7, lk. 51-53 https://artiklid.elnet.ee/record=b2019361*est

Mis on p-aadilised arvud?

Buldas, Ahto Arvutustehnika ja Andmetöötlus 1995 / 9, lk. 2-8

A New approach to constructing digital signature schemes

Buldas, Ahto; **Frisov, Denis**; **Laanoja, Risto**; Lakk, Henri; **Truu, Ahto** Advances in Information and Computer Security : 14th International Workshop on Security, IWSEC 2019, Tokyo, Japan, August 28-30, 2019 : proceedings 2019 / p. 363-373 https://doi.org/10.1007/978-3-030-26834-3_21 [Conference proceeding at Scopus](#) [Article at Scopus](#) [Conference proceeding at WOS](#) [Article at WOS](#)

New efficient utility upper bounds for the fully adaptive model of attack trees

Buldas, Ahto; **Lenin, Aleksandr** Decision and game theory for security : 4th International Conference, GameSec 2013, Fort Worth, TX, USA, November 11-12, 2013 : proceedings 2013 / p. 192-205 : ill https://doi.org/10.1007/978-3-319-02786-9_12 [Computer Proceedings metrics at Scopus](#) [Article at Scopus](#)

New linking schemes for digital time-stamping

Buldas, Ahto; Laud, Peeter Proceedings of the CISC'98, Seoul, Korea 1998 / p. 112-123 <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d3a005fb546ff78abc6ee453af4ee91aa6267c50>

On provably secure time-stamping schemes

Buldas, Ahto; Saarepera, Märt Advances in cryptology - ASIACRYPT 2004 : 10th International Conference on the Theory and

Application of Cryptology and Information Security : Jeju Island, Korea, December 5-9, 2004 : proceedings 2004 / p. 500-514 : ill https://link.springer.com/chapter/10.1007/978-3-540-30539-2_35

Oracle separation in the non-uniform model

Buldas, Ahto; Laur, Sven; Niitsoo, Margus Provable Security : Third International Conference : ProvSec 2009 : Guangzhou, China, November 11-13, 2009 : proceedings 2009 / p. 230-244 https://link.springer.com/content/pdf/10.1007/978-3-642-04642-1_19.pdf

Practical security analysis of e-voting systems

Buldas, Ahto; Mägi, Triinu Lecture notes in computer science 2007 / p. 320-335

Preemia olulise sotsiaal-majandusliku mõjuga innovaatilise tooteni viinud teaduslikul avastusel põhineva teadus- ja arendustöö eest : Ahto Buldas. Minu teadus : usaldus, saladused, aeg ja plokiahelad

Buldas, Ahto Eesti Vabariigi preemiad 2018 : teadus. F. J. Wiedemanni keeleauhind. Kultuur. Sport 2018 / lk. 64-75 : portr

Rational choice of security measures via multi-parameter attack trees

Buldas, Ahto; Laud, Peeter; Priisalu, Jaan; Saarepera, Märt; Willemson, Jan 1st International Workshop on Critical Information Infrastructures Security : Samos Island, Greece, August 30 - September 2, 2006 2006 / p. 232-243 https://link.springer.com/chapter/10.1007/11962977_19

Reliable and efficient determination of the likelihood of rational attacks = Ratsionaalsete rünnete tõepära efektiivne ja usaldusväärne kindlakstegemine

Lenin, Aleksandr 2015 https://www.ester.ee/record=b4530005*est

Secure and efficient implementation of electronic money

Buldas, Ahto; Draheim, Dirk; Saarepera, Märt Future Data and Security Engineering : Big Data, Security and Privacy, Smart City and Industry 4.0 Applications : 9th International Conference, FDSE 2022, Ho Chi Minh City, Vietnam, November 23-25, 2022 : proceedings 2022 / p. 34-51 https://doi.org/10.1007/978-981-19-8069-5_3 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Security proofs for hash tree time-stamping using hash functions with small output size

Buldas, Ahto; Laanoja, Risto Information security and privacy : 18th Australasian Conference, ACISP 2013, Brisbane, Australia, July 1-3, 2013 : proceedings 2013 / p. 235-250 : ill https://doi.org/10.1007/978-3-642-39059-3_16 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

A server-assisted hash-based signature scheme

Buldas, Ahto; Laanoja, Risto; Truu, Ahto Secure IT Systems : 22nd Nordic Conference, NordSec 2017, Tartu, Estonia, November 8-10, 2017 : proceedings 2017 / p. 3-17 : ill https://doi.org/10.1007/978-3-319-70290-2_1 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Server-supported RSA signatures for mobile devices

Buldas, Ahto; Kalu, Aivo; Laud, Peeter; Oruaas, Mart Computer Security - ESORICS 2017 : 22nd European Symposium on Research in Computer Security, Oslo, Norway, September 11-15, 2017 : proceedings, part I 2017 / p. 315-333 : ill https://doi.org/10.1007/978-3-319-66402-6_19 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Simple infeasibility certificates for attack trees

Buldas, Ahto; Lenin, Aleksandr; Willemson, Jan; Charnamord, Anton Advances in Information and Computer Security : 12th International Workshop on Security, IWSEC 2017, Hiroshima, Japan, August 30 - September 1, 2017 : proceedings 2017 / p. 39-55 : ill https://doi.org/10.1007/978-3-319-64200-0_3 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Sissejuhatus matroidide teooriasse

Buldas, Ahto Arvutustehnika ja Andmetöötlus 1995 / 3, lk. 2-5: ill

A systematic approach to offensive volunteer cyber militia

Ottis, Rain 2011 http://www.ester.ee/record=b2685353*est

Teadusest, ärist ja impeeriumi pärandusest

Buldas, Ahto A & A 2001 / 4, lk. 5-8 https://www.ester.ee/record=b1071898*est

A theory of secure and efficient implementation of electronic money

Buldas, Ahto; Draheim, Dirk; Saarepera, Märt SN Computer Science 2023 / art. 861, 25 p. : ill <https://doi.org/10.1007/s42979-023-02232-y> [Journal metrics at Scopus](#) [Article at Scopus](#)

Time-stamping with binary linking schemes

Buldas, Ahto; Laud, Peeter; Lipmaa, Helger; Willemson, Jan Advances in Cryptology : CRYPTO'98 : 18th Annual International Cryptology Conference, Santa Barbara, California, USA August 23-27, 1998 : proceedings 1998 / p. 486-501 : ill

Towards a foundation of Web3

Buldas, Ahto; Draheim, Dirk; Gault, Mike; Saarepera, Märt Future Data and Security Engineering : Big Data, Security and Privacy, Smart City and Industry 4.0 Applications : 9th International Conference, FDSE 2022, Ho Chi Minh City, Vietnam, November 23-25, 2022 : proceedings 2022 / p. 3-18 https://doi.org/10.1007/978-981-19-8069-5_1 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

TURBO TESTER : a set of software tools for CAD of test for digital circuits

Ubar, Raimund-Johannes; Tulit, Viljar; Buldas, Ahto; Saarepera, Märt Fourth EUROCHIP Workshop on VLSI Design Training, 29 September to 1 October 1993, [Toledo] 1993 / p. 396

An ultra-scalable blockchain platform for universal asset tokenization : design and implementation

Buldas, Ahto; Draheim, Dirk; Gault, Mike; Laanoja, Risto; Nagumo, Takehiko; Saarepera, Märt; Shah, Syed Attique; Simm, Joosep; Steiner, Jamie; **Tammet, Tanel;** Truu, Ahto IEEE Access 2022 / p. 77284-77322 : ill <https://doi.org/10.1109/ACCESS.2022.3192837> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Undeniable replies for database queries

Buldas, Ahto; Roos, Meelis; Willemson, Jan Databases and information systems : proceedings of the Fifth International Baltic Conference : Baltic DB & IS 2002 : Tallinn, June 3-6, 2002. Vol. 2 2002 / p. 215-226 : ill

Undeniable replies for database queries

Buldas, Ahto; Roos, Meelis; Willemson, Jan Databases and information systems. II, Fifth International Baltic Conference : Baltic DB & IS'2002 : Tallinn, Estonia, June 3-6, 2002 : selected papers 2002 / p. 43-54 : ill

A unifying theory of electronic money and payment systems

Buldas, Ahto; Saarepera, Märt; Steiner, Jamie; **Draheim, Dirk** techrxiv.org 2021 <https://doi.org/10.36227/techrxiv.14994558.v2>

Universally composable time-stamping schemes with audit

Buldas, Ahto; Laud, Peeter; Saarepera, Märt; Villemson, Jan Lecture notes in computer science 2005 / p. 359-373 https://link.springer.com/chapter/10.1007/11556992_26

Vastab Eesti parim noor teadlane anno 2002 [Ahto Buldas]

Buldas, Ahto; Ummelas, Mart Mente et Manu 2002 / 19. nov., lk. 1, 2 https://www.ester.ee/record=b1242496*est

Verified security of BLT signature scheme

Firsov, Denis; Buldas, Ahto; Truu, Ahto; Laanoja, Risto CPP 2020 - Proceedings of the 9th ACM SIGPLAN International Conference on Certified Programs and Proofs, co-located with POPL 2020, New Orleans 20 January 2020 through 21 January 2020 2020 / p. 244-257 <https://doi.org/10.1145/3372885.3373828>

Ühispanga tõhus toetus ülikoolisportidele : [31. okt. sõlmisid TTÜ ja Eesti Ühispank ülikoolisporti toetava sponsorlepingu : leping allkirjastati digitaalallkirjaga : kommenteerivad Gunnar Valge ja Ahto Buldas]

Valge, Gunnar; Buldas, Ahto Mente et Manu 2002 / 5. nov., lk. 1 : ill https://www.ester.ee/record=b1242496*est

Ühissalastuse skeemid

Buldas, Ahto; Leibak, Alar Arvutimaailm 1997 / 2, lk. 30-31