

Curriculum vitae

TARMO UUSTALU, TTÜ KÜBERNEETIKA INSTITUUT / TTÜ ARVUTITEADUSE INSTITUUT

Isikuandmed

- sündinud 19. jaan. 1969 Tallinnas; Eesti kodanik, abielus, 3 last

Haridustee

- doktorantuur arvutiteaduses (tarkvaratehnikas), Kungl. Tekn. Högskolan, Stockholm (KTH), sept. 1992–juuni 1998
- diplom- / magistriõpingud automatiseeritud juhtimissüsteemides / süsteemitehnikas ja informaatikas, Tallinna Polüteh. Inst. / Tallinna Tehnikaülikool (TTÜ), sept. 1987–juuni 1992

Akadeemilised kraadid

- PhD arvutiteaduses (tarkvaratehnikas), KTH, mai 1998
Dissertatsiooni tiitel: *Natural Deduction for Intuitionistic Least and Greatest Fixedpoint Logics, with an Application to Program Construction.*
- PhLic arvutiteaduses (tarkvaratehnikas), KTH, mai 1995
- MSc süsteemitehnikas ja informaatikas, TTÜ, juuni 1992

Teenistuskäik

- juhtivteadur, TTÜ Küberneetika Inst., juuni 2009–...; labori juhataja, märts 2014–...
- professor, TTÜ arvutiteaduse inst., sept. 2004–(aug. 2019); õppetooli juhataja, sept. 2013–(aug. 2019)
- dotsent, TTÜ arvutiteaduse inst., sept. 2002–aug. 2004
- järel doktorant-stipendiaat (bolsairo de pós-doutoramento), Dep. de Informática, Univ. do Minho, Braga, apr. 2000–apr. 2002
- vanemteadur, TTÜ Küberneetika Inst. sept. 1999–mai 2009 (peatatud apr. 2000–apr. 2002)
- dotsendi kt. (vik. universitetslektor), Inst. för Teleinformatik, KTH, Stockholm, juuli 1998–aug. 1999
- doktorant, uurimisinsener (forskningsingeniör), Inst. för Teleinformatik, KTH, Stockholm, sept. 1992–juuni 1998
- vanemtehnik, insener, Eesti TA Küberneetika Inst., sept. 1986–aug. 1992

Teaduslikud huvid ja teadustöö suunad

Struktuurne tõestusteooria ja tüübiteooria, algebraline ja kateoorne loogika, programmikeelte semantika, programmioloogiad, funktsionaalprogrammeerimine, programmide teisendamine ja konstrueerimine, modaalloogika arvutiteaduslikud rakendused.

Publikatsioonid

123 teaduspublikatsiooni, sh 9 toimetatud ajakirjaerinumbrit ja 6 konverentsikogumikku. Vt eraldi dokumenti. ORCID 0000-0002-1297-0579.

Tsiteeringute arv Google Scholar'i järgi 18. märtsi 2016 seisuga 1348, h-indeks 22.

Artiklid ajakirjades ja raamatutes/konverentsikogumikes:

- D. Ahman, T. Uustalu. Directed containers as categories. In R. Atkey, N. Krishnaswami, eds., *Proc. of 6th Wksh. on Mathematically Structured Functional Programming, MSFP 2016 (Eindhoven, Apr. 2016)*, *Electron. Proc. in Theor. Comput. Sci.*, v. 207, pp. 89–98. *Open Publishing Assoc.*, 2016.

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- B. Mayoh, E. Tyugu, T. Uustalu. Constraint satisfaction and constraint programming: A brief lead-in. In B. Mayoh, E. Tyugu, J. Penjam, eds., *Proc. of NATO ASI on Constraint Programming (Pärnu, Aug. 1993)*, NATO ASI Series F, v. 131, pp. 1–16. Springer, 1994.
- E. Tyugu, T. Uustalu. Higher-order functional constraint networks. In B. Mayoh, E. Tyugu, J. Penjam, eds., *Proc. of NATO ASI on Constraint Programming (Pärnu, Aug. 1993)*, NATO ASI Series F, v. 131, pp. 116–139. Springer, 1994.
- T. Uustalu. Combining object-oriented and logic paradigms: A modal logic programming approach. In O. Lehmman Madsen, ed., *Proc. of 6th Europ. Conf. on Object-Oriented Programming, ECOOP'92 (Utrecht, June/July 1992)*, *Lect. Notes in Comput. Sci.*, v. 615, pp. 98–113. Springer, 1992.
- T. Uustalu. Logics of time for programming use. In M. Oit, ed., *Preprints of Conf. on Tools and Environments for Developing Control Systems (Kääriku, May 1992)*, v. 1, pp. 190–204, 1992.
- T. Uustalu, P. Lorents. On some classes of hereditarily r.e. sets. *Proc. of Estonian Acad. Sci.: Phys., Math.*, v. 39, n. 2, pp. 108–111, 1990. (In Russian.)
- T. Uustalu, M. Pentus. Sequent systems of modal calculi. Preprint, 55 pp. Inst. of Cybernetics, Acad. Sci. of Estonian SSR, Tallinn, 1989. (In Russian.)

Toimetatud ajakirjanumbrid ja raamatud:

- T. Uustalu, ed. *Proc. of 21st Int. Wksh. on Types for Proofs and Programs, TYPES 2015 (Tallinn, May 2015)*, *Leibniz Int. Proc. in Inform.*, Dagstuhl Publishing, to appear.
- T. Uustalu, J. Vain, guest eds. *J. of Log. and Algebr. Meth. in Programming* (Selected Papers from 25th Nordic Wksh. on Programming Theory, NWPT '13, Tallinn, Nov. 2013), to appear.
- N. Swamy, T. Uustalu, guest eds. *J. of Funct. Program.* (Selected Papers from 18th ACM SIGPLAN Int. Conf. on Functional Programming, ICFP '13, Boston, MA, Sept. 2013), to appear.
- G. Morrisett, T. Uustalu, eds. *Proc. of 18th ACM SIGPLAN Int. Conf. on Functional Programming, ICFP' 13 (Boston, MA, Sept. 2013)* (= *ACM SIGPLAN Notices*, v. 48, n. 9), xii+469 pp. ACM Press, 2013.
- R. Matthes, T. Uustalu, guest eds. *Theor. Inform. and Appl.*, v. 47, n. 1 (Selected Papers from 6th Wksh. on Fixed Points in Computer Science, FICS 2009, Coimbra, Sept. 2009), pp. 1–132, 2013.
- T. Uustalu, J. Vain, guest eds. *J. of Log. and Algebr. Program.*, v. 79, n. 7 (Selected Papers from 20th Nordic Wksh. on Programming Theory, NWPT 2008, Tallinn, Nov. 2008), pp. 435–703, 2010.
- T. Altenkirch, T. Uustalu, guest eds. *Fundam. Inform.*, v. 102, n. 2 (Special Issue on Dependently Typed Programming), pp. 145–228, 2010.
- R. Matthes, T. Uustalu. *Proc. of 6th Wksh. on Fixed Points in Computer Science, FICS 2009 (Coimbra, Sept. 2009)*, 124 pp. Inst. of Cybernetics, 2009.
- C. McBride, T. Uustalu, guest eds. *J. of Funct. Program.*, v. 19, n. 3–4 (Selected Papers from Wksh. on Mathematically Structured Functional Programming, MSFP 2006, Kuressaare, July 2006), pp. 263–488, 2009.
- T. Uustalu, guest ed. *Sci. of Comput. Program.*, v. 74, n. 8 (Selected Papers from 8th Int. Conf. on Mathematics of Program Construction, MPC 2006, Kuressaare, July 2006), pp. 497–668, 2009.
- C. McBride, T. Uustalu, eds. *Proc. of Wksh. on Mathematically Structured Functional Programming, MSFP 2006 (Kuressaare, July 2006)*, *Electron. Wkshs. in Comput.*. British Comput. Soc., 2006.
- T. Uustalu, ed. *Proc. of 8th Int. Conf. on Mathematics of Program Construction, MPC 2006 (Kuressaare, July 2006)*, *Lect. Notes in Comput. Sci.*, v. 4014, x+455 pp. Springer, 2006.
- V. Vene, T. Uustalu, eds. *Revised Lectures from 5th Int. School on Advanced Functional Programming, AFP 2004 (Tartu, Aug. 2004)*, *Lect. Notes in Comput. Sci.*, v. 3622, x+357 pp. Springer, 2005.
- J. Vain, T. Uustalu, guest eds. *Proc. of Estonian Acad. of Sci., Phys., Math.*, v. 52, n. 4 (Selected Papers from 14th Nordic Wksh. on Programming Theory, NWPT'02, Tallinn, Nov. 2002), 2003.

Kraaditööd:

- T. Uustalu. Natural deduction for intuitionistic least and greatest fixedpoint logics, with an application to program construction (PhD thesis). Royal Inst. of Techn., Stockholm, 1998.
- T. Uustalu. Aspects of structural synthesis of programs (Lic. thesis). Royal Inst. of Techn., Stockholm, 1995.
- T. Uustalu. Combination of object-oriented and logic paradigms (MSc thesis). Tallinn Techn. Univ. / Norwegian Inst. of Techn., Trondheim, 1991.

Õpetamiskogemus

Kraadieelõppe kursused:

- põhiõppejõud, Diskreetne matemaatika, TTÜ rahvusvaheline õpe, kevad 2005
- põhiõppejõud, Rakendusloogika süvakursus, TTÜ, kevad 2004
- põhiõppejõud, Loogika arvutiteaduses, TTÜ, sügis 2014, sügis 2013, sügis 2012, sügis 2011, sügis 2010, sügis 2009, sügis 2008, sügis 2007, sügis 2006, sügis 2005, sügis 2004, sügis 2002
- assistent / põhiõppejõud, Loogiline programmeerimine, KTH, sügis 1998, sügis 1997, sügis 1996, sügis 1995
- assistent, Teadmiste esitamise ja töötlemise moodul, Teadmispõhine tarkvaratehnika, KTH, kevad 1996, kevad 1995, sügis 1994, sügis 1993, TTÜ, sügis 1994

Kraadiõppe kursused:

- põhiõppejõud, Kategooriateooria, TTÜ, kevad 2013
- põhiõppejõud, Funktsionaalprogrammeerimine, TTÜ, kevad 2004
- põhiõppejõud, Programmeerimiskeelte semantika, TTÜ, kevad 2014, kevad 2012, kevad 2010, kevad 2006, kevad 2003
- põhiõppejõud, Arvutiteaduse teooriaseminar/Formaalmeetodite mitteformaalseminar, TTÜ Kübern. Inst. kevad 2002–, sügis 1999–kevad 2000
- põhiõppejõud, Agentloogikad, TTÜ, kevad 1999
- assistent, Modaalloogika ja arvutused, KTH, kevad 1998
- põhiõppejõud, Programmeerimise loogikas ning Valitud eriteemade moodulid, Loogika arvutiteaduses, KTH, talv 1995/96
- põhiõppejõud, Programmeerimine loogikas, TÜ, sügis 1995
- põhiõppejõud, Denotatsioonsemantika moodul, Programmikeelte semantika, KTH, kevad 1993
- põhiõppejõud, Kitsenduste lahendamine ning kitsendustega programmeerimine, KTH, kevad 1993
- assistent, Tehisintellekti algoritmid, TTÜ, talv 1993/94, KTH, sügis 1992

Juhendamine:

- Hendrik Maarand, doktoriõpingud info- ja kommunikatsioonitehnoloogias, TTÜ, sügis 2015–...
- Niccolò Veltri, doktoriõpingud info- ja kommunikatsioonitehnoloogias, TTÜ, sügis 2012–...
- Denis Firsov, doktoriõpingud info- ja kommunikatsioonitehnoloogias, TTÜ, sügis 2012–..., magistriõpingud informaatikas (3+2), TTÜ, sügis 2010–2012
- Boriss Šelajev, doktoriõpingud info- ja kommunikatsioonitehnoloogias, TTÜ, sügis 2011–..., magistriõpingud informaatikas (3+2), TTÜ, sügis 2009–kevad 2011
- Elmo Todurov, doktoriõpingud info- ja kommunikatsioonitehnoloogias, TTÜ, sügis 2012–kevad 2014 (katkestatud)

- Andri Saar, doktoriõpingud info- ja kommunikatsioonitehnoloogias, TTÜ, sügis 2009–... , magistriõpingud informaatikas (3+2), TTÜ, kevad 2008–kevad 2009
- Andres Toom, doktoriõpingud info- ja kommunikatsioonitehnoloogias, TTÜ, sügis 2007–... , magistriõpingud arvuti- ja süsteemitehnikas, TTÜ, sügis 2006–kevad 2007
- Mait Peekma, magistriõpingud informaatikas, TTÜ, sügis 2006–sügis 2012, bakalaureuseõpingud informaatikas, TTÜ, kevad–sügis 2005
- Ando Saabas, doktoriõpingud info- ja kommunikatsioonitehnoloogias, TTÜ, sügis 2004–sügis 2008
- Rustam Novikov, magistriõpingud informaatikas, TTÜ, sügis 2003–kevad 2005
- Peep Küngas, magistriõpingud arvuti- ja süsteemitehnikas, TTÜ, sügis 2000–kevad 2002, bakalaureuseõpingud samas, sügis 1998–kevad 2000

Teaduskorraldusliku töö kogemus

Teadusürituste korraldamine:

- juhttoimkonna liige, Wkshs. on Dependently Typed Programming (DTP), 2013–... , Wkshs. on Generic Programming (WGP), 2013–... , ACM SIGPLAN Int. Confs. on Functional Programming (ICFP), 2012–2015, Int. Confs. on Types for Proofs and Programs (TYPES), 2011–... , Wkshs. on Mathematically Structured Functional Programming (MSFP), 2010–... , Europ. Joint. Confs. on Theory and Practise of Software (ETAPS), 2010–... , Wkshs. on Fixed Points in Computer Science (FICS), 2009–...
- programmitoimkonna esimees, 21st Int. Conf. on Types of Proofs and Programs (TYPES '15, Tallinn, mai 2015), 25th Nordic Wksh. on Programming Theory (NWPT '13, Tallinn, nov. 2013), 18th ACM SIGPLAN Int. Conf. on Functional Programming (ICFP '13, Boston, MA, sept. 2013), 6th Wksh. on Fixed Points in Computer Science (FICS '09, Coimbra, sept. 2009), 20th Nordic Wksh. on Programming Theory (NWPT '08, Tallinn, nov. 2008), Wksh. on Mathematically Structured Functional Programming (MSFP '06, Kuressaare, juuli 2006), 8th Int. Conf. on Math. of Program Construction (MPC '06, Kuressaare, juuli 2006)
- programmitoimkonna liige, 2nd Int. Symp. on Dependable Software Engineering: Theories, Tools and Applications (SETTA '16, Peking, nov. 2016), 1st Wksh. on Runtime Verification for Object-Oriented Languages and Systems, VORTEX '16 (Rooma, juuli 2016), 22nd Int. Conference on Types for Proofs and programs (TYPES '16, Novi Sad, mai 2016), 1st Int. Symp. on Dependable Software Engineering: Theories, Tools and Applications (SETTA '15, Nanjing, nov. 2014), 27th Nordic Workshop on Programming Theory (NWPT '14, Reykjavík, okt. 2015), 40th Int. Symp. on Mathematical Foundations of Computer Science (MFCS '15, Milano, aug. 2015), 12th Int. Conf. on Mathematics of Program Construction (MPC '15, Königswinter, juuni/juuli 2015), 26th Nordic Workshop on Programming Theory (NWPT '14, Halmstad, okt. 2014), 15th Symp. on Trends in Functional Programming (TFP '14, Soesterberg, mai 2014), 11th Latin American Symp. on Theoretical Informatics (LATIN '14, Montevideo, märts/apr. 2014), 15th Int. ACM SIGPLAN Symp. on Principles and Practice of Declarative Programming (PPDP' 13, Madrid, sept. 2013), 10th Int. Coll. on Theor. Aspects of Computing (ICTAC '13, Shanghai, sept. 2013), 24th Int. Conf. on Rewriting Techniques and Applications (RTA '13, Eindhoven, juuni 2013), 19th Workshop on Types for Proofs and Programs (TYPES '13, Toulouse, apr. 2013), 39th Int. Conf. on Current Trends in Theory and Practice of Computer Science (SOFSEM '13, Spindleruv Mlyn, jaan. 2013), ACM SIGPLAN 2013 Wksh. on Partial Evaluation and Program Manipulation (PEPM '13, Rooma, jaan. 2013), 24th Nordic Workshop on Programming Theory (NWPT '12, Bergen, okt./nov. 2012), 8th Wksh. on Fixed Points in Computer Science (FICS '12, Tallinn, märts 2012), 23rd Nordic Workshop on Programming Theory (NWPT '11, Västerås, okt. 2011), 12th Symp. on Programming Languages and Software Tools (SPLST '11, Tallinn, okt. 2011), 2nd Int. Conf. on Formal Verification of Object-Oriented Software (FoVeOOS '11, Torino, okt. 2011), 7th ACM SIGPLAN Wksh. on Generic Programming, WGP '11 (Tokyo, sept. 2011), 18th Int. Symp. on Fundamentals of Computation (FCT '11, Oslo, aug. 2011), 13th Int. ACM SIGPLAN Symp. on Principles and Practice of Declarative Programming (PPDP '11, Odense, juuli 2011), 22nd Nordic Workshop on Programming Theory (NWPT '10, Turku, nov. 2010), 3rd Wksh. on Mathematically Structured Functional Programming (MSFP '10, Baltimore, MD, sept. 2010), 7th Wksh. on Fixed Points in Computer Science (FICS '10, Brno, aug. 2010), Int. Conf. on Formal Verification of Object-Oriented Software (FoVeOOS '10, Paris, juuni 2010), 10th Int. Conf. on Mathematics on Program Construction (MPC '10, Quebec City, juuni 2010), 10th Int.

Wksh. on Coalgebraic Methods in Computer Science (CMCS '10, Paphos, märts 2010), 21st Nordic Workshop on Programming Theory (Lyngby, okt. 2009), 3rd Wksh. on Normalization by Evaluation (NBE '09, Los Angeles, CA, aug. 2009), 2009 ACM SIGPLAN Wksh. on Partial Evaluation and Semantics-Based Program Manipulation (PEPM '09, Savannah, GA, jaan. 2009), 9th Int. Conf. on Mathematics of Program Construction (MPC '08, Marseille, juuli 2008), 2nd Wksh. on Mathematically Structured Functional Programming (MSFP '08, Reykjavík, juuli 2008), 9th Int. Wksh. on Coalgebraic Methods in Computer Science (CMCS '08, Budapest, aprill 2008), 19th Nordic Wksh. on Programming Theory (NWPT '07, Oslo, okt. 2007), 9th Int. ACM SIGPLAN Symp. on Principles and Practice of Declarative Programming (PPDP '07, Wrocław, juuli 2007), 18th Nordic Wksh. on Programming Theory (NWPT '06, Reykjavík, okt. 2006), 8th Int. Wksh. on Coalgebraic Methods in Computer Science (CMCS '06, Viin, märts 2006), 17th Nordic Wksh. on Programming Theory (NWPT '05, Kopenhaagen, okt. 2005), 6th Symp. on Trends in Functional Programming (TFP '05, Tallinn, sept. 2005), 16th Nordic Wksh. on Programming Theory (NWPT '04, Uppsala, okt. 2004), 5th Int. Summer School and Wksh. on Advanced Functional Programming (AFP '04, Tartu, aug. 2004), 15th Nordic Wksh. on Programming Theory (NWPT '03, Turku, okt. 2003)

- korraldustoimkonna esimees, COST ARVI MC&WG Meeting (Tallinn, dets. 2015), Estonian-Finnish Logic Meeting (Rakvere, nov. 2015), 25th Nordic Wksh. on Programming Theory (NWPT '13, Tallinn, nov. 2013), NII Shonan Meeting on “Coinduction in computation structures and programming languages” (Shonan Village, sept./okt. 2013), 15th European Joint Conf. on Theory and Practice of Software (ETAPS '12, Tallinn, märts/apr. 2012), korraldustoimkonna esimees, COST FoVeOOS Winter School (Viinistu, jaan. 2008), 20th Nordic Wksh. on Programming Theory (NWPT '08, Tallinn, nov. 2008), 8th Int. Conf. on Math. of Program Construction / 11th Int. Conf. on Algebraic Methodology and Software Technology (MPC/AMAST '06, Kuressaare, juuli 2006), IFIP WG 2.8 Meeting #22 (Kalvi, okt. 2005), 6th Symp. on Trends in Functional Programming / 10th ACM SIGPLAN Int. Conf. on Functional Programming / 4th Int. Conf. on Generative Programming and Component Engineering (TFP/ICFP/GPCE '05, Tallinn, sept./okt. 2005), FP5 IST Thematic Network APPSEM II 2nd Ann. Meeting (APPSEM '04, Tallinn, apr. 2004)
- korraldustoimkonna liige, Testcom-FATES/FORTE 2007 (Tallinn, juuni 2007), korraldustoimkonna liige, 14th Nordic Wksh. on Programming Theory (NWPT'02, Tallinn, nov. 2002)
- programmi- ja korraldustoimkonna esimees, XXI Eesti Arvutiteaduse Talvekool (EWSCS '16, Palmse, veebr./märts 2016), XX Eesti Arvutiteaduse Talvekool (EWSCS '15, Palmse, märts 2015), XIX Eesti Arvutiteaduse Talvekool (EWSCS '14, Palmse, märts 2014), XVIII Eesti Arvutiteaduse Talvekool (EWSCS '13, Palmse, märts 2013), XVII Eesti Arvutiteaduse Talvekool (EWSCS '12, Palmse, veebr./märts 2012), XVI Eesti Arvutiteaduse Talvekool (EWSCS '11, Palmse, veebr./märts 2011), XV Eesti Arvutiteaduse Talvekool (EWSCS '10, Palmse, veebr./märts 2010), XIV Eesti Arvutiteaduse Talvekool (EWSCS '09, Palmse, märts 2009), XIII Eesti Arvutiteaduse Talvekool (EWSCS '08, Palmse, märts 2008), XII Eesti Arvutiteaduse Talvekool (EWSCS '07, Palmse, märts 2007), XI Eesti Arvutiteaduse Talvekool (EWSCS '06, Palmse, märts 2006), X Eesti Arvutiteaduse Talvekool (EWSCS '05, Palmse, veebr./märts 2005), IX Eesti Arvutiteaduse Talvekool (EWSCS '04, Palmse, veebr./märts 2004)
- programmi- ja korraldustoimkonna liige, VIII Eesti Arvutiteaduse Talvekool (EWSCS '03, Palmse, märts 2003), VII Eesti Arvutiteaduse Talvekool (EWSCS '02, Palmse, märts 2002), VI Eesti Arvutiteaduse Talvekool (EWSCS '01, Palmse, märts 2001), V Eesti Arvutiteaduse Talvekool (EWSCS '00, Palmse, veebr./märts 2000), IV Eesti Arvutiteaduse Talvekool (EWSCS '99, Palmse, veebr./märts 1999)
- initsiaator ja põhikorraldajaid, Tallinna-Tartu vahelised arvutiteaduse teooriapäevad Käos (jaan. 2016), Jõekülas (okt. 2015), Rogosis (veebr. 2015), Ratniekis (okt. 2014), Narva-Jõesuus (mai 2014), Sakal (okt. 2013), Otepääl (veebr. 2013), Lilastes (sept. 2012), Kubijal (jaan. 2012), Tõrvel (okt. 2011), Nelijärvel (veebr. 2011), Rakaris (sept./okt. 2010), Andul (veebr. 2010), Mäetagusel (okt. 2009), Käärikul (jaan./veebr. 2009), Jõulumäel (okt. 2008), Põlvas (jaan. 2008), Vanaõuel (sept. 2007), Rõuges (jaan. 2007), Voorel (sept./okt. 2006), Kokel³ (veebr. 2006), Viinistul (okt. 2005), Kokel² (veebr. 2005), Veskisillal (okt. 2004), Kokel (jaan./veebr. 2004), Pedasel (okt. 2003), Arulas (veebr. 2003), Roostal (okt. 2002)
- seminaride korraldaja KübIs arvutiteadusest loogikas ettekandjatega välismaalt, kevad 2002–

Retsenseerimine/oponeerimine/ekspert:

- retsenseerinud artikleid rahvusvahelistele ajakirjadele Theor. Comput. Sci., Inform. and Comput., Math. Struct. in Comput. Sci., Theor. Inform. and Appl., J. of Funct. Program., Logic J. of IGPL, Fund. Inform.,

Nordic J. of Comput., Computer J. jt., rahvusvahelistele konverentsidele Int. Conf. on Mathematical Foundations of Computer Science (MFCS), Conf. on Automated Deduction (CADE), Int. Conf. on Algebraic and Coalgebraic Methods in Comput. Sci. (CALCO), Int. Conf. on Mathematical Foundations of Programming Semantics (MFPS), Int. Conf. on Algebraic Methods and Software Technology (AMAST), Int. Conf. on Mathematics of Program Construction (MPC), ACM SIGPLAN Int. Conf. on Funct. Program. (ICFP), Wksh. on Types for Proofs and Programs (TYPES), Wksh. on Coalgebraic Methods in Comput. Sci. (CMCS), Int. Conf. on Foundations of Software Science and Computation Structures (FoSSaCS), Int. Coll. on Automata, Languages and Programming (ICALP), IEEE Symp. on Logic in Computer Science (LICS), Europ. Conf. on Computer Science Logic (CSL), Int. Conf. on Typed Lambda Calculi and Applications (TLCA), Andrei Ershov Memorial Conf. on Perspectives of System Informatics (PSI), IEEE Conf. on Autom. Software Engineering (ASE), Scand. Conf. on Artif. Intell. (SCAD) jt.

- toimetuskolleegiumi liige, J. of Univ. Comput. Sci., nov. 2007–
- oponeerinud doktoritööd Utrechti Ülikoolis, 2016
- oponeerinud doktoritööd Chalmersi Tehnikaülikoolis, 2016
- oponeerinud doktoritööd Paul Sabatier' (Toulouse'i 3.) Ülikoolis, 2016
- oponeerinud doktoritööd Cambridge'i Ülikoolis, 2013
- oponeerinud doktoritööd Yaoundé 1. Ülikoolis, 2012
- oponeerinud doktoritööd Austraalia Rahvuslikus Ülikoolis, 2011
- oponeerinud doktoritööd Oslo Ülikoolis, 2013, 2010
- oponeerinud doktoritööd Nottinghami Ülikoolis, 2009
- oponeerinud doktoritööd Tartu Ülikoolis, 2006
- oponeerinud doktoritööd ja litsentsiaaditööd Stockholmi Ülikoolis, 2005 ja 2003
- doktoritöö kaitsmiskomisjoni esimees TTÜs, 2010, 2009
- doktoritöö kaitsmiskomisjoni esimees Chalmersi Tehnikaülikoolis, 2008
- promotsioonikomisjoni ekspert, Pohang Univ. of Sci. and Techn., 2014
- promotsioonikomisjoni liige, Saskatchewan Ülikool, 2011
- dotsenditiitli hindamiskomisjoni liige Chalmersi Tehnikaülikoolis, 2008
- retsenseerinud projektitaotlusi Islandi Teadusfondile (Rannís), Hollandi Teadusorganisatsioonile (NWO), Eesti Teadusfondile
- ETAGi hindamisnõukogu tehnikateaduste ekspertgrupi liige, 2015–
- TKNi reaalteaduste ekspertgrupi liige, 2006–2011, 2005–2006
- ETF tehnikateaduste ekspertide paneeli liige, 2002

Juhtkogud

- TTÜ KüBI teadusnõukogu liige, apr. 2013–, apr. 2010–apr. 2013, märts 2009–apr. 2010, apr. 2004–apr. 2007

Teadust populariseeriv tegevus

Teadusaasta 2011/2012 saadik.

Artikleid, tõlkeid arvutiteaduse, loogika ja keelefilosoofia kohta "Akadeemias" jm. Kroonikat ja ülevaateid eesti arvutiteadusest mitmesugustes aastaraamatutes jms.

Osalus erialastes ühendustes

- liige, Eesti Teaduste Akadeemia, al. dets. 2010 (liikmed valitakse)
- liige, Int. Federation for Inform. Processing (IFIP), WG 2.1 “Algorithmic Languages and Calculi”, al. sept. 2010 (liikmed kutsutakse)
- liige, Assoc. for Computing Machinery (ACM), al. mai 2003, Europ. Assoc. for Programming Languages and Systems (EAPLS), al. sept. 1997

Osalus suuremates projektides

- aktsiooni asejuht, COSTi aktsioon *European research network on types for programming and verification, EUTYPES* (märts 2016–märts 2020)
- juhtuümiku liige, ELi struktuuritoetuste (2014–2020, ERDF) teaduse tippkeskuste arendamise meetme projekt *Eesti IT tippkeskus, EXCITE* (märts 2016–märts 2023)
- juhtuümiku liige, H2020 WIDESPREAD/TEAMING programmi koordinaatsiooni- ja toetusaktsioon *Centre of excellence on connected digital economy, ITEE* (juuni 2015–mai 2016)
- teema juht, institutsionaalne uurimistoetus *Tugevate garantiidega tarkvara meetodid, tööriistad ja protsessid* (jaan. 2015–dets. 2020)
- juhtuümikonna liige, COSTi aktsioon *Runtime verification beyond monitoring, ARVI* (dets. 2014–dets. 2018)
- juhtuümikonna liige, COSTi aktsioon *Behavioral types for reliable large-scale software systems, BETTY* (dets. 2013–okt. 2016)
- projekti juht, ELi struktuuritoetuste (2007–2013, ERDF) IKT T&A toetamise meetme projekt *Coinduction for semantics, analysis and verification of communicating and concurrent reactive software* (apr. 2013–nov. 2015)
- teema juht, sihtfinantseeritav teadusteema *Usaldusväärsed tarkvara- ja inimkeele tehnoloogiad* (jaan. 2012–dets. 2014)
- juhtuümikonna liige, COSTi aktsioon *Rich models toolkit* (dets. 2011–okt. 2013)
- Kübi rühma juht, FP7 ICT integreeritud projekt *Highly adaptable and trustworthy software using formal models, HATS* (mai 2010–veebr. 2013)
- projekti juht, ELi struktuuritoetuste (2007–2013, ERDF) teaduse tippkeskuste arendamise meetme projekt *Arvutiteaduse tippkeskus, EXCS* (juuli 2008–aug. 2015)
- juhtuümikonna liige, COSTi aktsioon *Formal verification of object-oriented software, FoVeOOS* (märts 2008–märts 2012)
- teema juht, sihtfinantseeritav teadusteema *Usaldusväärsed tarkvara- ja inimkeele tehnoloogiad* (jaan. 2006–dets. 2011)
- projekti juht, struktuuritoetuste (2002–2006, ESF) doktorikoolide meetme projekt *Info- ja kommunikatsioonitehnoloogia doktorikool* (sept. 2005–juuni 2008)
- Kübi rühma juht, FP6 IST integreeritud projekt *MOBIUS* (sept. 2005–aug. 2009)
- Kübi rühma juht, FP6 IST koordinaatsiooniaktsioon *Types for proofs and programs, TYPES* (sept. 2004–apr. 2008)
- Kübi rühma juht, FP5 IST temaatiline võrgustik *Applied semantics, APPSEM II* (jaan. 2003–juuni 2006)
- tööühma juht, HTMi teaduse tippkeskus *Töökindlate arvutisüsteemide uurimise keskus, CDC* (nov. 2002–dets. 2007)
- projekti asejuht (teadus- ja arendusjuht), Kübi koordineeritud FP5 IST kaasnevate meedete projekt *Establishment of a virtual centre of excellence for ICT RTD in Estonia, eVikings II* (nov. 2002–sept. 2005)
- täitja, FP5 IST temaatiline võrgustik *Types for proofs and programs, TYPES* (aug. 2000–juuli 2003)

Grandid

- ETFi uurimisprojekti-grant *Matemaatilised struktuurid programmeerimiskeeltes* (jaan. 2012–märts 2016)
- Eesti-Prantsuse koostööprogrammi *Parrot* projektigrant *Andme- ja juhtimisvoogu sisaldavate süinkroonkeelte semantika* (jaan. 2011–dets. 2012)
- ETFi uurimisprojekti-grant *Tüübisüsteemid, programmioloogikad ja usaldusväärne koodigeneerimine* (jaan. 2007–dets. 2010)
- Royal Society projektigrant *Programmeerimine algebrate, koalgebrate, monaadide ja komonaadidega* (juuli 2003–juuni 2005)
- Eesti-Prantsuse koostööprogrammi *Parrot* projektigrant *Tüübid ja tõestused ohutus tarkvaras* (jaan. 2003–dets. 2004)
- ETFi uurimisprojekti-grant *Mitteklassikalised loogikad ja programmeerimisteooria* (jaan. 2003–dets. 2006)
- järel doktorantuuri grant Minho Ülikoolilt, Portugali Teadus- ja Tehnoloogiafondilt (FCT) (2 aastat, apr. 2000–apr. 2002)
- ETFi uurimisprojekti-grant *Intermediaar- ja modaalloogikad programmikeelte teoorias ja formaalmeetodites* (jaan. 2000–dets. 2002)
- KTH täisgrant doktoriõpinguteks, nn. excellenstjänst (4 nominaalaastat 100% õpingukoormusega = 5 füüsilist aastat 80% õpingukoormusega, sept. 1992–aug. 1997)
- 14 toetust EITSAlt iga-aastase talvekooli korraldamiseks, 2003–2016
- kaks reisitoetust EITSAlt, 2002, reisitoetus EITSAlt, 2004, kaks reisitoetust EITSAlt, 2006, reisitoetus EITSAlt, 2007, reisitoetus EITSAlt, 2008, reisitoetus EITSAlt, 2009, reisitoetus EITSAlt, 2010, reisitoetus EITSAlt, 2011, reisitoetus EITSAlt, 2012, välisõppejõu kutsumise toetus EITSAlt, sügis 2003, välisõppejõu kutsumise toetus EITSAlt, kevad 2005
- reisistipendium Soome Sihtasutuselt, 1992

Tunnustused, auhinnad

Auhinnad:

- riigi teaduspreemia 4 viimase aasta teadustulemuste eest täppisteadustes, 2015
- ETAPS 2012 parima artikli nominatsioon
- TTÜ 2010. aasta teadlane, 2011
- ETAPS 2010 parima artikli nominatsioon
- 2.-3. koht TTÜ 2008.–2009. a parima publikatsiooni konkursil täppisteadustes, 2010
- TTÜ Arengufondi Boris Tamme stipendium, 2002

Muud tunnustused:

- kutsutud lektor, Summer School on Generic and Effectful Programming (Oxford, juuli 2015)
- kutsutud kõneleja, workshop “Certification of High-Level and Low-Level Programs” (Pariis, juuni 2014)
- kutsutud lektor, Spring School of 11th Int. Conf. on Software Engineering and Formal Methods, SEFM '11 (Montevideo, nov. 2011)
- kutsutud kõneleja, 2009 Int. Conf. on Category Theory, CT 2009 (Cape Town, juuni/juuli 2009)
- kutsutud kõneleja, töötuba "Logik in der Informatik 14" (Braunschweig, nov. 2007)
- kutsutud kõneleja, 4th Int. Wksh. on Higher-Order Rewriting, HOR '07 (Pariis, juuni 2007)
- kutsutud kõneleja, sümposium 2003 Assoc. for Symbolic Logic European Summer Meeting, Logic Colloquium '03 (Helsinki, aug. 2003)

Keelteoskus

Valdab vabalt eesti, inglise, rootsi, vene keelt; saab raskusteta aru norra, soome keelest, mõningal määral portugali, hiina keelest.

Kontaktandmed

TTÜ Küberneetika Instituut
Akadeemia tee 21, 12618 Tallinn
email tarmo(at)cs.ioc.ee
tel. 620 4250, faks 620 4151

TTÜ arvutiteaduse instituut
Akadeemia tee 15A, 12618 Tallinn

Tarmo Uustalu
Tallinnas, 18. märtsil 2016