

Aasta tehnikaüliõpilane on mees nagu orkester : [intervjuu Kristjan Pildiga]

Pilt, Kristjan; Feldmann, Mati Inseneeria 2009 / lk. 36-37 : ill https://artiklid.elnet.ee/record=b1140678*est

Activity classification for real-time wearable systems : effect of window length, sampling frequency and number of features on classifier performance

Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert 2016 IEEE EMBS Conference on Biomedical Engineering and Sciences (IECBES) : Kuala Lumpur, 4-8 December 2016 2016 / p. 460-464 : ill
<https://doi.org/10.1109/IECBES.2016.7843493>

Adaptive sum comb filter for PPG signals by using ECG signal as reference

Pilt, Kristjan; Meigas, Kalju; Lass, Jaanus; Rosmann, M.; Kaik, Jüri BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 317-320 : ill

Advancing novel physical fatigue assessment and human activity monitoring methods towards personalized feedback with wearable sensors = Kantavatel seadmetel põhinevate füüsilise väsimuse hindamise ning inimese aktiivsuse monitoorimise meetodite arendamine personaalseks tagasisideks

Allik, Ardo 2022 <https://doi.org/10.23658/taltech.62/2022> <https://digikogu.taltech.ee/et/item/230f302e-0cf1-4b86-a9d3-0927a51b36e2>
https://www.esther.ee/record=b5525012*est

Aortic augmentation index is dependent on body side in healthy young subjects

Einstein, Sandra; Pilt, Kristjan; Palmar, Merlin; Meigas, Kalju; Viigimaa, Margus High Blood Pressure & Cardiovascular Prevention 2019 / p. 375–382 : ill <https://doi.org/10.1007/s40292-019-00335-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Application of novel QT interval correction and QT/RR assessment models to ECG 24-hour recordings in cardiac patients
Veski, Kristi; Karai, Deniss; Pilt, Kristjan; Meigas, Kalju; Kaik, Jüri Estonian journal of engineering 2010 / 1, p. 107-120 : ill

Arterial stiffness assessment for early diagnosis of atherosclerosis

Pikta, Marika; Viigimaa, Margus; Pilt, Kristjan; Kööts, Kristina; Meigas, Kalju Cardiology 2015 / p. 32
<https://www.karger.com/Article/Abstract/431110>

Arterite jäikus ja kardiovaskulaarne risk

Pilt, Kristjan; Viigimaa, Margus Lege Artis : ajakiri Eesti arstidele 2020 / lk. 47-50 : ill https://www.esther.ee/record=b1575283*est
<https://www.med24.ee/ajakirjad/legeartis/aprill-2020/arterite-jäikus-ja-kardiovaskulaarne-risk>

Assessing hemodynamics from the photoplethysmogram to gain insights into vascular age : a review from VascAgeNet

Charlton, Peter H.; Paliakaite, Birute; **Pilt, Kristjan**; Bachler, Martin; Zanelli, Serena; Kulin, Daniel; Allen, John; Hallab, Magid; Bianchini, Elisabetta; Mayer, Christopher C. American journal of physiology-heart and circulatory physiology 2022 / p. H493-H522
<https://doi.org/10.1152/ajpheart.00392.2021> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Assessment of algorithms for detecting an arterial pulse pressure wave equiphase point

Temitski, Kristina; Lauri, J.; Pilt, Kristjan; Meigas, Kalju; Viigimaa, Margus BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 191-194 : ill

Assessment of associations between arterial mechanical properties and biochemical blood markers for early detection of atherosclerosis

Kööts, Kristina; **Pilt, Kristjan**; Sepa, Madis; Pikta, Marika; **Fridolin, Ivo; Meigas, Kalju; Viigimaa, Margus** 8th European Medical and Biological Engineering Conference : proceedings of the EMBEC 2020, November 29 – December 3, 2020 Portorož, Slovenia 2021 / p. 121-129 https://doi.org/10.1007/978-3-030-64610-3_15 [Conference Proceedings at Scopus](#)

Association between optical signal derived aortic augmentation index and cardiovascular risk factors in healthy volunteers

Pikta, Marika; Viigimaa, Margus; Pilt, Kristjan; Kööts, Kristina; Meigas, Kalju Reports on global health research 2020 / art. 119, 8 p. : ill <https://doi.org/10.29011/rghr-119.100019> <https://www.gavindpublishers.com/article/view/association-between-optical-signal-derived-aortic-augmentation-index-and-cardiovascular-risk-factors-in-healthy-volunteers>

Association between ventricular repolarization and main cardiovascular risk factors

Pšenitšnikov, Igor; Šipilova, Tatjana; Karai, Deniss; Riipulk, Jevgeni; Veski, Kristi; Pilt, Kristjan; Kaik, Jüri Scandinavian cardiovascular journal : SCJ 2011 / p. 33-40 : ill

Biomeditsiinitehnika - tehnoloogia tervise heaks

Hinrikus, Hiie; Bachmann, Maie; Pilt, Kristjan; Meigas, Kalju; Fridolin, Ivo Teadusmõte Eestis (X). Tehnikateadused. 3 : [artiklikogumik] 2019 / lk. 48-58 : ill https://www.esther.ee/record=b5208765*est

Classification algorithm improvement for physical activity recognition in maritime environments

Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert World Congress on Medical Physics and Biomedical Engineering 2018 : June 3–8, 2018, Prague, Czech Republic (Vol. 3) 2019 / p. 13-17 https://doi.org/10.1007/978-10-9023-3_3 Conference proceeding Article at Scopus Article at WOS

Comparison of predictive equations for basal metabolic rate

Allik, Ardo; Mägi, Siiri; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert Wireless Mobile Communication and Healthcare : 7th International Conference, MobiHealth 2017, Vienna, Austria, November 14–15, 2017 : proceedings 2018 / p. 261-264 : ill <https://doi.org/10.1007/978-3-319-98551-0> Conference Proceedings at Scopus Article at Scopus Article at WOS

Construction of gender-specific regression models for aortic length estimation based on computed tomography images

Zemtsovskaja, Galina; Pilt, Kristjan; Samarin, Andrei; Albina, Jelena; Meigas, Kalju; Viigimaa, Margus Health and technology 2020 / p. 679–687 : ill <https://doi.org/10.1007/s12553-019-00391-8> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Electroencephalography as an objective indicator of stress

Gavriljuk, Marietta; Uudeberg, Tuuli; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Bachmann, Maie 19th Nordic-Baltic Conference on Biomedical Engineering and Medical Physics : Proceedings of NBC 2023, June 12–14, 2023, Liepaja, Latvia 2023 / p. 221–226 https://doi.org/10.1007/978-3-031-37132-5_28

Establishing best practices in photoplethysmography signal acquisition and processing

Charlton, Peter H.; **Pilt, Kristjan; Kyriacou, Panayiotis A.** Physiological measurement 2022 / art. 050301, 6 p

<https://doi.org/10.1088/1361-6579/ac6cc4> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Fall detection and activity recognition system for usage in smart work-wear [Online resource]

Leier, Mairo; Jervan, Gert; Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600959>

Increased pulse wave velocity strongly related to age in apparently healthy people of high cardiovascular risk population

Zemtsovskaja, Galina; Pilt, Kristjan; Albina, Jelena; Meigas, Kalju; Viigimaa, Margus European Heart Journal 2020 / ehaa946.3783 <https://doi.org/10.1093/ehjci/ehaa946.3783>

Influence of gender on the QT interval variability and duration in different wake–sleep stages in non-sleep apneic individuals : analysis of polysomnographic recordings

Viigimäe, Moonika; Karai, Deniss; Pilt, Kristjan; Polo, Olli; Huhtala, Heini; Meigas, Kalju; Kaik, Jüri Journal of electrocardiology 2017 / p. 444-449 : ill <http://dx.doi.org/10.1016/j.jelectrocard.2017.03.012>

Influence of mental stress on the arterial stiffness parameters detected from photoplethysmographic signal waveform

Pilt, Kristjan; Karai, Deniss; Bachmann, Maie; Gavriljuk, Marietta; Allik, Ardo; Uudeberg, Tuuli 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 4 p <https://doi.org/10.1109/BEC56180.2022.9935609>

Interrelationship between protein bound uremic toxin indoxyl sulfate concentration in blood and spent dialysate during hemodialysis treatment : [abstract]

Paats, Joosep; Adoberg, Annika; Arund, Jürgen; Fridolin, Ivo; Lauri, Kai; Leis, Liisi; Pilt, Kristjan; Tanner, Risto; Luman, Merike Nephrology dialysis transplantation 2021 / p. 382 : ill <https://doi.org/10.1093/ndt/gfab099.005>

Intima-media thickness of the common carotid artery of patients with chronic kidney disease

Silluta, Sandra; Pilt, Kristjan; Kööts, Kristina; Viigimaa, Margus; Meigas, Kalju Cardiology 2015 / p. 37 <https://www.karger.com/Article/Abstract/431110>

Intradialytic on-line multicomponent reduction ratio monitoring in spent dialysate by a novel miniaturized optical sensor

Pilt, Kristjan; Arund, Jürgen; Adoberg, Annika; Leis, Liisi; Fridolin, Ivo; Luman, Merike Nephrology Dialysis Transplantation 2019 / p. 643-644 <https://doi.org/10.1093/ndt/gfz102.SuO012>

Intradialytic on-line multicomponent total removed solute monitoring in spent dialysate by a novel miniaturized optical sensor

Adoberg, Annika; Paats, Joosep; Arund, Jürgen; Leis, Liisi; Pilt, Kristjan; Fridolin, Ivo; Luman, Merike Nephrology Dialysis Transplantation 2021 <https://doi.org/10.1093/ndt/gfaa141.TO015>

Intradialytic on-line multicomponent total removed solute monitoring in spent dialysate by a novel miniaturized optical sensor

Adoberg, Annika; Paats, Joosep; Arund, Jürgen; Leis, Liisi; Pilt, Kristjan; Fridolin, Ivo; Luman, Merike Nephrology Dialysis Transplantation 2020 / gfaa141.TO015 <https://doi.org/10.1093/ndt/gfaa141.TO015>

Intradialytic on-line multicomponent total removed solutes monitoring in spent dialysate by a novel miniaturized optical

sensor

Pilt, Kristjan; Arund, Jürgen; Adoberg, Annika; Leis, Liisi; Luman, Merike; Fridolin, Ivo International journal of artificial organs 2019 / p. 415-416 <https://journals.sagepub.com/doi/10.1177/0391398819860985>

Investigation of photoplethysmographic signal augmentation index estimation differences between fingers

Pilt, Kristjan; Silluta, Sandra; Kööts, Kristina; Karai, Deniss; Meigas, Kalju; Viigimaa, Margus EMBEC & NBC 2017 : joint conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 2017 2018 / p. 819-822 : ill https://doi.org/10.1007/978-981-10-5122-7_205

In-vitro investigation of flow profiles in arteries using the photoplethysmograph

Pilt, Kristjan; May, James M.; Kyriacou, Panayiotis A. Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) 2021 / p. 7211-7214 <https://doi.org/10.1109/EMBC46164.2021.9629713> Conference Proceedings at Scopus Article at Scopus Article at WOS

Linnaplaneerimise heaolu skoor mõõdab, mida linnaelanikud tegelikult tunnevad

Fridolin, Ivo; Pilt, Kristjan; Bachmann, Maie; Grišakov, Kristi; Tärnov, Külle; Sternfeldt, Silver Mente et Manu 2022 / lk. 24-26 : fot https://www.estet.ee/record=b1242496*est

Methods, devices and results of arterial stiffness estimation

Pilt, Kristjan Cardiology 2015 / p. 15 <https://www.karger.com/Article/Abstract/431110>

Mikrolaine- ja optiline tehnika : loengumaterjalid biomeditsiinitehnika ja meditsiinifüüsika magistriöppü üliõpilastele
2012 http://www.estet.ee/record=b2860846*est

A novel physical fatigue assessment method utilizing heart rate variability and pulse arrival time towards personalized feedback with wearable sensors

Allik, Ardo; Pilt, Kristjan; Viigimäe, Moonika; Fridolin, Ivo; Jervan, Gert Sensors 2022 / art. 1680 <https://doi.org/10.3390/s22041680> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Online urea concentration estimation from spent dialysate using optical sensor

Pilt, Kristjan; Arund, Jürgen; Adoberg, Annika; Leis, Liisi; Luman, Merike; Fridolin, Ivo XV Mediterranean Conference on Medical and Biological Engineering and Computing - MEDICON 2019 : proceedings of MEDICON 2019, September 26–28, 2019, Coimbra, Portugal 2020 / p. 1459-1464 https://doi.org/10.1007/978-3-030-31635-8_180 Conference proceedings at Scopus Article at Scopus Article at WOS

Optical pulse wave signal analysis for determination of early arterial ageing in diabetic patients = Optilise pulsilaine signaali analüüs arterite varase vananemise määramiseks diabeedihaigetele

Pilt, Kristjan 2014 https://www.estet.ee/record=b3049979*est

Optimization of physical activity recognition for real-time wearable systems : effect of window length, sampling frequency and number of features

Allik, Ardo; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Leier, Mairo; Jervan, Gert Applied sciences 2019 / art. 4833, 14 p. : ill <https://doi.org/10.3390/app9224833> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Photoplethysmographic signal processing using adaptive sum comb filter for pulse delay measurement

Pilt, Kristjan; Meigas, Kalju; Ferenets, Rain; Kaik, Jüri Estonian journal of engineering 2010 / 1, p. 78-94 : ill https://artiklid.elnet.ee/record=b1964973*est

Photoplethysmographic signal rising front analysis for the discrimination of subjects with increased arterial ageing

Pilt, Kristjan; Meigas, Kalju; Kööts, Kristina; Viigimaa, Margus Proceedings of the Estonian Academy of Sciences 2014 / p. 221-226 : ill

Pilot study for estimating physical fatigue based on heart rate variability and reaction time

Allik, Ardo; Pilt, Kristjan; Viigimäe, Moonika; Fridolin, Ivo XV Mediterranean Conference on Medical and Biological Engineering and Computing - MEDICON 2019 : proceedings of MEDICON 2019, September 26–28, 2019, Coimbra, Portugal 2020 / p. 193-200 https://doi.org/10.1007/978-3-030-31635-8_23 Conference proceeding at Scopus Article at Scopus Article at WOS

POS-648 medicines intake influences accuracy of the uremic retention molecules' optical monitoring in spent dialysate : the case of uremic toxin uric acid and paracetamol

Paats, Joosep; Adoberg, Annika; Arund, Jürgen; Fridolin, Ivo; Holmar, Jana; Leis, Liisi; Pilt, Kristjan; Tanner, Risto; Uhlin, Nils Fredrik Arne; Luman, Merike Kidney International Reports 2022 / p. S277-S278 : ill <https://doi.org/10.1016/j.ekir.2022.01.681>

Possibility to use Finapres signal for the estimation of aortic pulse wave velocity [Electronic resource]

Pilt, Kristjan; Meigas, Kalju; Viigimaa, Margus; Temitski, Kristina IFMBE proceedings ; Vol. 37 2011 / p. 524-527 : ill [CD-ROM]

Pulse wave registration from radial artery using photoplethysmographic method

Pilt, Kristjan; Leier, Mairo; Silluta, Sandra; Kööts, Kristina; Meigas, Kalju; Viigimaa, Margus Conference proceedings : 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society : Milan, Italy, August 25-29 2015 2015 / p. 6425-6428 : ill <http://dx.doi.org/10.1109/EMBC.2015.7319863>

Second derivative analysis of forehead photoplethysmographic signal in healthy volunteers and diabetes patients

[Electronic resource]

Pilt, Kristjan; Meigas, Kalju; Temitski, Kristina; Viigimaa, Margus IFMBE proceedings ; Vol. 39 2012 / p. 410-413 : ill [CD-ROM]

Second derivative photoplethysmographic signal analysis of differences between fingers in healthy subjects [Online resource]

Pilt, Kristjan; Silluta, Sandra; Palmar, Merlin; Karai, Deniss; Meigas, Kalju; Viigimaa, Margus BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2019 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600985>

Serum levels and removal by haemodialysis and haemodiafiltration of tryptophan-derived uremic toxins in ESKD patients

Paats, Joosep; Adoberg, Annika; Arund, Jürgen; Fridolin, Ivo; Leis, Liisi; Luman, Merike; Pilt, Kristjan; Uhlin, Nils Fredrik

Arne International journal of molecular sciences 2020 / art. 1522, 19 p. : ill <https://doi.org/10.3390/ijms21041522> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Smart photoplethysmographic sensor for pulse wave registration at different vascular depths

Leier, Mairo; Jervan, Gert; Pilt, Kristjan Proceedings of the 8th Annual Conference of the Estonian National Doctoral School in Information and Communication Technologies : December 5-6, 2014, Rakvere 2014 / p. 67-70 : ill

Smart photoplethysmographic sensor for pulse wave registration at different vascular depths

Leier, Mairo; Pilt, Kristjan; Karai, Deniss; Jervan, Gert Conference proceedings : 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society : Milan, Italy, August 25-29 2015 2015 / p. 1849-1852 : ill <http://dx.doi.org/10.1109/EMBC.2015.7318741>

Stroke volume assessment by impedance cardiography : comparative analysis with transthoracic echocardiography

Silluta, Sandra; Pilt, Kristjan; Bischler, Elja; Kööts, Kristina; Meigas, Kalju; Viigimaa, Margus EMBEC & NBC 2017 : joint

conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 2017 2018 / p. 398-401 https://doi.org/10.1007/978-981-10-5122-7_100

The analysis of finger photoplethysmographic waveform in healthy volunteers and diabetes patients [Electronic resource]

Pilt, Kristjan; Meigas, Kalju; Temitski, Kristina; Viigimaa, Margus IFMBE proceedings ; Vol. 38 2013 / p. 55-58 : ill [CD-ROM]

The Association of pulse wave velocity with blood pressure and biochemical cardiovascular risk markers in young Tallinn adults

Zemtsovskaja, Galina; Pilt, Kristjan; Albina, Jelena; Meigas, Kalju; Viigimaa, Margus Atherosclerosis 2019 / p. e167-e168 <https://doi.org/10.1016/j.atherosclerosis.2019.06.506>

Treatment with paracetamol can interfere with the intradialytic optical estimation in spent dialysate of uric acid but not of indoxyl sulfate

Adoberg, Annika; Paats, Joosep; Arund, Jürgen; Dhondt, Annemieke; Fridolin, Ivo; Glorieux, Griet; Holmar, Jana; Lauri, Kai; Leis, Liisi; Luman, Merike; Pilt, Kristjan; Uhlin, Nils Fredrik Arne; Tanner, Risto Toxins 2022 / art. 610

<https://doi.org/10.3390/toxins14090610> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS