

PERSONAL INFORMATION

Tsothe Putkaradze



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 tsotnep@gmail.com



EDUCATION AND TRAINING

30 Sep 2018–Present

PhD candidate

EQF level 8

Georgian Technical University, Tbilisi (Georgia)

Topic: IoT communication security

Supervisor: Ia Mosashvili

1 Sep 2016–1 Sep 2017

PhD candidate Information and Communication Technology

EQF level 8

Tallinn Technical University, Tallinn (Estonia)

- Topic: Turn-Preserving Fault-Tolerant Routers in Many-Core Architectures

- Supervisors : Jaan Raik, Peeter Ellervee

9 Jul 2017–15 Jul 2017

ACACES - Certificate of Participant

Advanced Computer Architecture and Compilation for High- Performance and Embedded Systems (HiPEAC), Fiuggi (Italy)

- presented poster of Fault-resilient NoC router with transparent resource allocation

- Advanced topics in memory Systems (Moinuddin Qureshi)

- Quantum computing : from circuit to Architecture (Koen Bertels and Carmen G. Almudever)

- High-performance On-Chip Interconnects for Emerging SoCs (Tushar Krishna)

- Design and Analysis of Time-Critical Systems (Jan Reineke)

8 May 2017–10 May 2017

BELAS - Certificate of Participant

Biannual European - Latin American Summer School on Design, Test and Reliability, Rotterdam (Netherlands)

Delft University of Technology

- Combining Structural and Functional Test for Safety-Critical Devices

- Manufacturing Defects as Reliability Concerns in SRAMs

- Radiation, Interference and Soft Errors

- Using Programmable SoC(APSoC) for Reliable Applications: Qualification Methodologies, Fault Tolerance Techniques and Radiation Tests

- Security in Modern Computer Systems, HW Trojans and SW Vulnerabilities: Threats and Emerging Solutions

- How to secure the Internet of Things?

30 Jan 2017–3 Feb 2017

EUROPRACTICE - Certificate of Participant

Comprehensive Digital IC Implementation and Sign-Off, Didcot (United Kingdom)

- Synthesis & implementation

- Timing constraints & clock tree
- post synthesis gate level simulation
- Scan test, atpg & verification

1 Sep 2014–1 Jul 2016

MSc in Engineering

EQF level 7

Tallinn Technical University, Tallinn (Estonia)

- Topic : Turn Preserving Fault Tolerance Methodology for On-Chip Routers and Implementation on Bonfire Router
- Supervisors : Jaan Raik, Siavoosh Payandeh Azad, Behrad Niazmand
- Performance Based Scholarship, Spring Semester 2016
- IT academy Scholarship, Spring Semester 2016
- Eesti Telekom Stipend, Autumn Semester 2015
- Performance Based Scholarship, Autumn Semester 2015
- IT academy Scholarship, Autumn Semester 2015

1 Sep 2010–1 Jul 2014

BSc in IT and Control Systems

EQF level 6

Georgian Technical University, Tbilisi (Georgia)

20 Nov 2012–30 Nov 2012

Certificate of Participant

Kharkiv National University of Radioelectronics, Kharkov (Ukraine)

10 Jul 2011–20 Jul 2011

Certificate of Participant

Sevastopol National University of nuclear energy and industry, Sevastopol (Ukraine)

WORK EXPERIENCE

22 Jan 2020–Present

Assistant Professor

Ilia State University, Tbilisi (Georgia)

- Digital Circuits
- Digital Logic Laboratory

1 Dec 2019–Present

IT support

Justice House Parking, Tbilisi (Georgia)

- ANPR
- Networking

1 Sep 2019–Present

Invited Lecturer

San Diego State University - Georgia, Tbilisi (Georgia)

- Digital Logic Laboratory
- Digital Circuits

1 Nov 2017–15 Nov 2019

Automation Engineer

Softmaster, Tbilisi (Georgia)

- Traffic Lights Controllers (SWARCO)
- Smart house,
- Queue systems
- Parking systems

software support for "Токарно-карусельный станок", "Рафамет 112 / КЗПС " and lots of etc.

1 Apr 2018–1 Aug 2019 **Invited Lecturer**
 Georgian Technical Training Center, Tbilisi (Georgia)
 PLC programming Basics

1 Feb 2018–31 Jan 2019 **Invited Lecturer**
 Gori State Teaching University, Gori (Georgia)
 Computer Skills
 Linux

27 Jun 2016–27 Sep 2016 **Hardware Engineer Intern**
 University of Valencia, Valencia (Spain)
 - Implementing reconfigurable neuroprocessor on development FPGA board Virtex-6 ML605. Using AXI lite, AXI stream interfaces, on Baremetal Application

1 Feb 2016–1 Jun 2016 **Teaching Assistant**
 Tallinn Technical University, Tallinn (Estonia)
 - System On Chip Design on Digilent Zedboard ZYNQ-7000
 - Linux device tree
 - Linux UIO drivers
 - VHDL & Verilog
 - SoC

1 Dec 2015–1 Feb 2016 **Software Engineer Intern**
 Kuehne+Nagel, Tallinn (Estonia)
 - java unit testing
 - Spring, Junit and Mockito frameworks

1 Oct 2015–1 Apr 2016 **Firmware Engineer**
 Start-up company, Tallinn (Estonia)
 - developing and maintaining software for Digitally Controllable Stomp Boxes for Electronic Guitars,
 - Arduino Micro

PERSONAL SKILLS

Mother tongue(s) Georgian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Russian	B2	B2	B2	B2	B1
German	A2	A2	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
 Common European Framework of Reference for Languages - Self-assessment grid

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Independent user	Independent user	Proficient user

Digital skills - Self-assessment grid

- Hardware Related :
 - CNC G & M code
 - VHDL, Verilog, Vivado HLS
 - DMA, Jtag, Zynq PS
 - tcl
 - LL, STL for PLC
 - Embedded C
- FPGA :
 - - Nexys 2 - Spartan 3E FPGA
 - - Nexys 3 - Spartan 6 FPGA
 - - Nexys 4 - Artix 7 FPGA
 - - Zynq 7000 - Artix 7 FPGA
- MCU :
 - - MSP430
 - - ARM cortex a9
 - - Raspberry PI
 - - Arduino Micro
 - - Arduino UNO
- PLC & CNC :
 - - Unitronics VisiLogic 230 & InTouch HMI
 - - Siemens Sinumerik 840d sl
 - - Siemens Simatic S7-300
- Other :
 - - Inkjet EBS-250
 - - Inkjet EBS-260
 - - Flash-point tester ATB-21
 - - Enviromux-E-5D
 - - Explosives and Trace Detector QS-B220
 - - Flow Pack Machine GG-600
 - - Hardness tester 404SXV
 - - Markem Imaje 8018
 - - Rafamet lathe UBB 112
 - - and many other
- Software Related :
 - C++, Java, Python
 - Linux, Git, Latex

ADDITIONAL INFORMATION

- Publications** "Fault-Resilient NoC Router with Transparent Resource Allocation", ReCoSoC 2017, Madrid, Spain. <https://ieeexplore.ieee.org/document/8016161/>
- Publications** "From Online Fault Detection to Fault Management in Network-on-Chips: A Ground-Up Approach", DDECS 2017, Dresden, Germany. <https://ieeexplore.ieee.org/document/7934565/>
- Conferences** MEDIAN Finale, Workshop on Manufacturable and Dependable Multicore Architectures at Nanoscale 2015. Tallinn, Estonia.
- Competitions** ACM ICPC North-Eastern European Regional Contest in Programming, Georgian Technical University, 2012, Tbilisi, Georgia
- Competitions** Open Southern Caucasus Championship in Programming, Georgian Technical University, 2012, Tbilisi, Georgia.