

## CURRICULUM VITAE

<b>1. Mbiemri:</b>	<b>KURTAJ</b>	
<b>2. Emri:</b>	<b>LAVDIM</b>	
<b>3. Nacionaliteti:</b>	Shqiptar	
<b>4. Shtetësia:</b>	Republika e Kosovës	
<b>5. Data e Lindjes:</b>	05.05.1965	
<b>6. Gjinia:</b>	M	
<b>7. Detajet kontaktuese:</b>		
<i>Email:</i>	Lavdim.kurtaj@uni-pr.edu	
<i>Tel:</i>	+383 44 199 839	
<b>8. Niveli Arsimor:</b>		
<i>Institucioni:</i>	Universiteti i Prishtinës Fakulteti Elektroteknik Drejtimi Elektronikë	
<i>Data e diplomimit:</i>	08.11.1988	
<i>Diploma :</i>	<b>Inxhinier i Diplomuar i Elektroteknikës</b> (5 vite studim universitar, 300 ECTS)	
<i>Institucioni:</i>	Universiteti i Prishtinës Fakulteti i Inxhinierisë Elektrike dhe Kompjuterike	
<i>Data e diplomimit:</i>	11.03.1999	
<i>Diploma/ Magjistratura :</i>	<b>Magjistër i Shkencave Elektroteknike</b> (2 vite studim universitar, 120 ECTS)	
<i>Institucioni:</i>	Universiteti i Prishtinës "Hasan Prishtina" Fakulteti i Inxhinierisë Elektrike dhe Kompjuterike Departamenti Automatikë	
<i>Data e diplomimit:</i>	20.07.2016	
<i>Diploma/ Doktorata :</i>	<b>Doktor i Shkencave të Inxhinierisë Elektrike</b> (6 semestra, 180 ECTS)	
<b>9. Titulli akademik:</b>		
<i>Institucioni:</i>	Universiteti i Prishtinës "Hasan Prishtina" Fakulteti i Inxhinierisë Elektrike dhe Kompjuterike	
<i>Data e zgjedhjes:</i>	<b>Profesor Asistent, 10.09.2018</b>	
<b>10. Publikimet shkencore</b>		
<b>Revistat Shkencore</b>		
<i>Titulli i punimit</i>	<i>Emri i revistës</i>	<i>Viti / Vëllimi / faqet</i>
Lavdim Kurtaj, Vjosa Shatri, and Ilir Limani. Cerebellar Model Controller with new Model of Granule Cell-Golgi	International Journal of Electrical and Computer Engineering	December 2018, 8(6), 4292~4309.

Cell Building Blocks and Two-Phase Learning Acquires Multitude of Generalization Capabilities in Controlling Robot Joint without Exponential Growth in Complexity		
Lavdim Kurtaj, Vjosa Shatri, and Ilir Limani. On-line learning of robot inverse dynamics with Cerebellar Model Controller in feedforward configuration	International Journal of Mechanical Engineering and Technology	2018, 9(2), pp. 445–460.
Vjosa Shatri, Lavdim Kurtaj, and Ilir Limani. Electrical-Thermal-Mechanics Modeling of Circuit Breaker Thermal Tripping Unit Using Multiphysics Partial Element Equivalent Circuit Method Combined with Lumped Behavioral Tripping Mechanism Model	International Journal of Mechanical Engineering and Technology	2018, 9(2), pp. 461–481.
Vjosa Shatri, Ruzhdi Sefa, and Lavdim Kurtaj. MATLAB Partial Element Equivalent Circuit Toolbox for Solving Coupled Electromagnetic-Circuit Problems	International Journal of Current Engineering and Technology	October 2013, Vol.3, No.4, pp. 1351-1362.
Lavdim Kurtaj, Ilir Limani, Vjosa Shatri, and Avni Skeja. The Cerebellum: New Computational Model that Reveals its Primary Function to Calculate Multibody Dynamics Conform to Lagrange-Euler Formulation	IJCSI International Journal of Computer Science Issues	September 2013, Vol. 10, Issue 5, No 2, pp. 14-24.
Vjosa Shatri, Ruzhdi Sefa, Lavdim Kurtaj, and Avni Skeja. From Partial Element Equivalent Circuit (PEEC) to muphyPEEC for Solving Coupled Multiphysics Problems	IJCSI International Journal of Computer Science Issues	November 2013, Vol. 10, Issue 6, No 2, pp. 42-53.

Kujtim Hyseni, Lavdim Kurtaj, Ilir Limani. Homogeneous distributed control system – a model of code generation	Journal of Automation & Systems Engineering	September 2009, Vol. 3, Issue 3, Paper 2.
<b>Përmbledhje (abstraktet) nga Konferencat Ndërkombëtare dhe Kombëtare Shkencore</b>		
<i>Titulli i punimit</i>	<i>Emri i revistës</i>	<i>Viti / Vëllimi / faqet</i>
Vjosa Shatri, Lavdim Kurtaj, and Ilir Limani. Hardware-in-the-loop architecture with MATLAB/Simulink and QuaRC for rapid prototyping of CMAC neural network controller for ball-and-beam plant	Proceedings of 2017 40th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2017, Opatija, Croatia, 22-26 May 2017.	2017, pp. 1201-1206.
Lavdim Kurtaj, Vjosa Shatri, and Ilir Limani. Comparative Performance of two Types of Cerebellar Model Controllers for Controlling Robot Joint - Size, Learning and Generalization	Proceedings of 2017 6th Mediterranean Conference on Embedded Computing, MECO 2017, Bar, Montenegro, 11-15 June 2017.	2017, pp. 246 - 250.
Lavdim Kurtaj, Vjosa Shatri, and Ilir Limani. New Model of Information Processing at Granule Cell Layer Makes Cerebellum as Biological Equivalent for ANFIS and CANFIS - Sharing of Processing Resources and Generalization	2017 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE), Naples, Italy, 9-12 July 2017.	2017, pp. 1 - 8.
Lavdim Kurtaj, Vjosa Shatri. HMI and Control Loops over Serial Line Communication Channel with MODBUS protocol for Combinatorial Weigher at Potato Chips Production Line	Proceedings of the 10th WSEAS International Conference on AUTOMATION & INFORMATION	2009, ICAI'09, pp. 220-226.
Lavdim Kurtaj, Vjosa Shatri, Ilir Limani. Weighing Head Model and Performance Estimation for Combinatorial	Proceedings of the 11th WSEAS International Conference on Automatic Control, Modelling and	2009, ACMOS'09, pp. 468-474.

Weigher at Potato Chips Production Line	Simulation	
L. Kurtaj, V. Shatri. Conveyor Model and its Usage for Selecting Effective Control Variable for Combinatorial Weigher Heads	Proceedings of the IASTED International Conference Control and Applications (CA 2009) July 13 - 15, 2009 Cambridge, UK	2009, CA 2009, pp. 15-20.
Kujtim Hyseni, Lavdim Kurtaj, Ilir Limani. Homogeneous distributed control system – a model of code generation	Proceedings of the 8th WSEAS International Conference on SIGNAL PROCESSING, ROBOTICS and AUTOMATION,	2009, ISPRA '09, fq. 132-136.
Kujtim Hyseni, Ilir Limani, Lavdim Kurtaj, Genc Hyseni. SNMP to PTP management interface	2009 International IEEE Symposium on Precision Clock Synchronization for Measurement, Control and Communication	2009, ISPCS 2009
Vjosa Shatri, Ruzhdi Sefa, Lavdim Kurtaj. Relative Position between Mesh Cell Edges and Interrelation with Accuracy when using FastCap2 for Capacitance Calculations of 3-D PEEC-like Cells	Proceedings of the 12th WSEAS International Conference on Systems Theory and Scientific Computation	2012, ISTASC'12, pp. 213-218.
Vjosa Shatri, Ruzhdi Sefa, Lavdim Kurtaj. Partial Element Equivalent Circuit (PEEC) Toolbox for MATLAB, integrating FastCap2 and FastHenry2 for Calculation Partial Elements, and Multisim orLTspice for circuit simulation	Proceedings of the 12th WSEAS International Conference on Systems Theory and Scientific Computation	2012, ISTASC'12, pp. 163-169
Lavdim Kurtaj, Ilir Limani, Vjosa Shatri, Avni Skeja. Dependence of CMAC Neural Network Properties at initial, during, and after Learning Phase from Input Mapping Function	Proceedings of the 12th WSEAS International Conference on Systems Theory and Scientific Computation	2012, ISTASC'12, pp. 187-192

<b>Publikime te tjera</b>		
<i>Titulli i punimit</i>	<i>Emri i revistës</i>	<i>Viti / Vëllimi / faqet</i>
Lavdim Kurtaj. Mësuarja dhe përgjithësimi i veprimeve për robot me sistem pamor (Learning and generalization of actions for robot with vision system)	PhD Thesis	Universiteti i Prishtinës "Hasan Prishtina", Fakulteti Inxhinierisë Elektrike dhe Kompjuterike, Prishtinë, 2016
Lavdim Kurtaj. Aplikimi i rrjetave neurale në detyrën e pozicionimit dhe të përcjelljes së trajektores tek robotët (Application of neural networks to robot positioning and tracking problems)	Master Thesis	Universiteti i Prishtinës, Fakulteti i Elektroteknikës, Prishtinë, 1999
Lavdim Kurtaj. Osciloskopi digjital (Digital oscilloscope)	Diploma Thesis	Universiteti i Prishtinës, Fakulteti Teknik, Prishtinë, 1988
L. Kurtaj, S. Shala, Sh. Muriqi. Digitalno merenje neelektricitetih velicina (rewarded with a golden plaque ) (e shpërblyer me pllaketë të artë)	Nauka mladih, Novo Mesto, Slloveni	1980
Mr.sc Lavdim KURTAJ, Mechatronical Project	Book	University of Prishtina, Faculty of Electrical and Computer Engineering, and WUS Austria, 2011
<b>11. Përvoja e punës:</b>		
<i>Data:</i>	1992 - present	
<i>Vendi:</i>	Prishtinë	
<i>Emri i Institucionit:</i>	<b>Universiteti i Prishtinës</b>	
<i>Pozita:</i>	<b>Asistent, Ligjërues, Profesor Asistent</b>	
<i>Përshkrimi:</i>		
<i>Data:</i>	1989 - 1992	
<i>Vendi:</i>	Prishtinë	
<i>Emri i Institucionit:</i>	<b>Fabrika e amortizatorëve</b>	
<i>Pozita:</i>	<b>Inxhinier i mirëmbajtjes së makinave</b>	
<i>Përshkrimi:</i>		

<i>Data:</i>	
<i>Vendi:</i>	
<i>Emri i Institucionit:</i>	
<i>Pozita:</i>	
<i>Përshkrimi:</i>	
<b>12. Arsimimi dhe trajnimet:</b>	
<i>Data:</i>	
<i>Kualifikimi i arritur:</i>	
<i>Temat kryesore/shkathësitë profesionale të arritura:</i>	
<i>Organizuar nga: emri i institucionit:</i>	
<i>Niveli kombëtar dhe ndërkombëtar i kualifikimit:</i>	
<i>Data:</i>	
<i>Kualifikimi i arritur:</i>	
<i>Temat kryesore/shkathësitë profesionale të arritura:</i>	
<i>Organizuar nga: emri i institucionit:</i>	
<i>Niveli kombëtar dhe ndërkombëtar i kualifikimit:</i>	
<b>13. Informata shtesë:</b>	
<i>Shkathësitë organizative dhe kompetencat:</i>	
<i>Shkathësitë kompjuteri dhe kompetencat:</i>	<p><b>Lista e projekteve profesionale:</b></p> <p>Integrating Siemens drives with microcontroller systems - USS protocol, 2012-2013.</p> <p>Natural interfaces for robots and control systems: Nintendo Wii controller and Microsoft Kinect, 2012-.*.</p> <p>Coordination of multi-axis machine servo-drives over sensor-actuator networks, 2011-2012.</p>

	<p>Visual inspection of potato-chips quality with robotic removal of over-fried and over-flavored pieces, 2011-2013.</p> <p>Embedded controller for plastic injection machine with GUI-based HMI, 2010.</p> <p>Home and building automation networks and protocols: different microcontroller implementation and performance, 2010-*. </p> <p>Fiscal data security issues in fiscal electronic devices, 2010-2012.</p> <p>MODBUS-over-Ethernet and IEC61850 protocol for distributed control systems, 2009-*. </p> <p>IEEE 1588 for time synchronization over distributed control systems and its embedded implementation issues, 2009-2010.</p> <p>CNC for cutting plastics, 2008.</p> <p>SCADA for high-voltage protection devices, Siemens SIPROTEC SJ63, connected on RS485 network with IEC60870-5-103 protocol, 2007.</p> <p>PLC for automatic packing machine for Potato Chips, 2006.</p> <p>SCADA for monitoring and control of transport/weighing/ packing line - RS485 network with MODBUS protocol, 2005-2006.</p> <p>Hardware-Software package for automation of automatic combinatorial weigher with central circular vibrator, 8 radial vibrators, 8 measuring heads, 16 memories and one exit, 2005.</p> <p>PLC based automation of book gluing machine, 2005.</p> <p>PLC based automation of book gluing machine, 2004.</p> <p>Matrix Information Display with modular structure connected with RS485 network, 2003.</p> <p>Reconditioning of machine for tube cutting and final processing or shock absorbers, 2002.</p> <p>Reconditioning of automatic shock absorber testing machine, 2002.</p> <p>Reconditioning of Schweppes filling line, 2001.</p> <p>Reconditioning of plastic manufacturing line based on Siemens PLC, 2000.</p> <p>Reconditioning of microprocessor controlled line for welded steel reinforcement nets, 2000.</p>
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	<p>Short-wave power amplifier for long-distance wireless phones, 1996.</p> <p>Sinusoidal On-Line UPS 6kW, 1995.</p> <p>Inverter/Charger 12VDC/220VAC/400W-600W with toroidal transformer, 1995.</p> <p>Project for automatic temperature control for food conserving rooms, with remote monitoring and control, 1995.</p> <p>Data-Logger for Panasonic phone PBX, 1995.</p> <p>Microprocessor controlled local phone PBX with Pulse/Tone dialing and solid-state switch matrix: 2 Inputs - 8 Locals, 1995.</p> <p>Microprocessor system for elevator, 1994.</p> <p>Microprocessor system for controlling visual effects for advertisement signs with sign-specific programming language, 1994.</p> <p>Microprocessor controlled local phone PBX with solid-state switch matrix, with GUI and per-unit charge registration: 2 inputs – 24 Locals, 1994.</p> <p>Microprocessor controlled local phone PBX with relay-based switch matrix: 1 Input - 2-6 Locals, 1993.</p> <p>Cross-assembler development for Z80 microprocessor, 1993.</p> <p>Microprocessor system for controlling visual effects for advertisement signs, 1992.</p> <p>Matrix Information Display, 1992.</p> <p>EPROM Emulator interface for Personal Computer, 1991.</p> <p>EPROM Programmer interface for Personal Computer, 1991.</p> <p>Project for microprocessor controlled automatic machine for testing gas shock absorbers, 1990.</p> <p>Project for increased working security at forklifts, 1989.</p> <p>Microprocessor system for automation of tube cutting machine, 1989.</p> <p>Automation of circular welding equipment, 1989.</p> <p>Digital Oscilloscope, Spectral Analyser, and Logical Analyser for Amstrad CPC464 micro-computer, 1988.</p>
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	<p>EPROM Programmer for Amstrad CPC464 micro-computer, 1987.</p> <p>Hadware/Software packet for enabling Single-Step program execution for Galaksija Computer, 1985.</p>		
<i>Shkathtësitë të gjuhës: (1 deri 5: Ivlerësimi më i ulët - 5 fluent)</i>			
<i>Gjuha</i>	<i>Konverzimi</i>	<i>Shkrimi</i>	<i>Leximi</i>
Shqip	5	5	5
Anglisht	5	5	5
Serbe, Kroate, Bosnjake	5	5	5
<b><i>Shpërblimet dhe anëtarësimet:</i></b>			