Short Resume

Name: **Laurenţiu Marian Mierlă**

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Email: [lau@44tek.com](mailto:lau@44tek.com)

Nationality: Romanian

Age:30

Gender:Male

**Professional experience**

**Over 8 year of exprience in software development industry.**

Current Position: **R&D Manager**, **Software Architect, Data Scientist** and **Co-founder** at 44Tek Enterprise (<http://44tek.com>), Fraud Solve Solutions

**Telecom Analytics:** Revenue assurance, Pricing Optimization, Fraud Detection

**Data Science**: Scala, R, Python, MatLab

**Big Data**: Hadoop, HDFS, Hive, Spark, Map Reduce, Sqoop, Oozie, Livy Server, Hortowords Data Platform, Cloudera

**Machine Learning**: SparkML, TensorFlow, R, AzureML

**Web Technologies**: HTML, HTML5, CSS, ASP.Net Web Forms, ASP.Net MVC 4, WebAPI, PHP, Java EE, JSP, Spring, Spring Web, JavaScript, jQuery, KnockoutJS

**Desktop Technologies**: .Net, C/C++, C#, Java, Pascal, Entity Framework, Hibernate, Linq to SQL, XPO, Devexpress Components, Telerik Components, LINQ

**Mobile Technologies**: Android, Android Studio

**Database Engines**: Microsoft SQL Server, Oracle, MySQL, PostgreSQL, SQLite, MongoDB

**Blockchain**: ERC20, Solidity, Blockchain-based architectures, DAG-based architectures, Exchange services

**Version control**: Git, SVN, TFS

**Graphics**: OpenGL API, Adobe Photoshop

**Virtualization Systems**: XenServer, VMware Vsphere

**Cloud platforms**: Amazon Web Services, Google Cloud, Microsoft Azure

**IDEs**: IntelliJ Idea, Visual Studio, Eclipse, R Studio, Qt Creator, Android Studio

**Continuous integration/**

**build tools**: Jenkins

**Networking**: IP addressing, VLSM, TCP/IP protocol suite, switching, VLAN, routing protocols (RIPv1, RIPv2, EIGRP, OSPF), CISCO Internetwork Operating System

**Scentific experience**:

Februarie 2011 –

Mai 2012: **Research assistant** in the DEPLOY European Project, University of Pitești, FP7 EC grant no. 214158 *(*[*http://www.deploy-project.eu*](http://www.deploy-project.eu)*).*

Septembrie 2012 –

December 2017: **Researcher** in the MuVeT Romanian Project, University of Pitești (<http://muvet.ifsoft.ro>)

November 2015 –

February 2016: **Research Assistant** at the University of Sheffield, United Kingdom

**Scentific work**:

May 15, 2009, ***„The Virutal Exploration of 3D Hightmaps, Generated using Models form Grayscale Images”,*** University of Pitesti

May 7, 2010, **„*The design and Implementation of Compilers generating code for the .Net Platform*”**, University of Pitesti

May 13, 2011, ***„Business Applications: Modern approaches to old requirements”***, University of Pitesti

I. Dinca, F. Ipate, L. Mierla, A. Stefanescu: **Learn and Test for Event-B - A Rodin Plugin**, in ABZ 2012, 361-364, 2012.

F. Ipate, Ciprian Dragomir, R. Lefticaru, Laurentiu Mierla, M. J. Perez-Jimenez: **Using a Kernel P system to solve the 3-Col problem**, in Int. Conf. on Membrane Computing 2012 (CMC 2012)), Proceedings, 243-258, 2012.

M. Gheorghe, F. Ipate, R. Lefticaru, M. J. Perez-Jimenez, A. Turcanu, L. V. Cabrera, M. Garcia-Quismondo, Laurentiu Mierla: **3-Col problem modelling using simple kernel P systems**, International Journal of Computer Mathematics, 90(4), 816-830, 2013.

F. Ipate, R. Lefticaru, L. Mierla, L. Valencia-Cabrera, H. Han, G. Zhang, C. Dragomir, M. J. Perez-Jimenez, M. Gheorghe: **Kernel P Systems: Applications and Implementations**, BIC-TA 2013, 1081-1089, 2013.

M. Gheorghe, F. Ipate, C. Dragomir, L. Mierla, L. Valencia-Cabrera, Manuel Garcia-Quismondo, M. J. Perez-Jimenez: **Kernel P Systems - Version 1**, BWMC 2013, 97-124, 2013.

C. Dragomir, F. Ipate, S. Konur, R. Lefticaru, L. Mierla: **Model Checking Kernel P Systems, Int. Conf. on Membrane Computing** 2013, LNCS 8340: 151-172, 2013.

A. Turcanu, L. Mierla, F. Ipate, A. Stefanescu, H. Bai, M. Holcombe, S. Coakley: **Modelling and Analysis of E. coli Respiratory Chain in Applications of Membrane Computing in Systems and Synthetic Biology**. Emergence, Complexity and Computation Volume 7, 247-266, 2014.

M. E. Bakir, F. Ipate, S. Konur, L. Mierla, I. Niculescu: **Extended Simulation and Verification Platform for Kernel P Systems**, Int. Conf. on Membrane Computing 2014, LNCS, 158-178, 2014.

S. Konur, C. Ladroue, Harold Fellermann, D. Sanassy, L. Mierla, F. Ipate, S. Kalvala, M. Gheorghe and N. Krasnogor. **Modeling and Analysis of Genetic Boolean Gates using Infobiotics Workbench**. Proceedings of Workshop on Verification of Engineered Molecular Devices and Programs 2014 (CAV 2014), pp. 26-37, Vienna, Austria, 2014.

S. Konur, M. Gheorghe, H. Fellermann, D. Sanassy, N. Krasnogor, C. Ladroue, S. Kalvala, L. M. Mierla & Florentin Ipate, **In Silico Design and Analysis of Genetic Boolean Gates**: Membrane Computing Approach, J. Theor. Comp. Sci.

D. Sanassy, H. Fellermann, S. Konur, C. Ladroue, L. Mierla, S. Kalvala, M. Gheorghe, N. Krasnogor. **Modelling and stochastic simulation of synthetic biological Boolean gates**. Proceedings of 16th IEEE International Conference on High Performance Computing and Communications, pp. 404-408, Paris, France, 2014.

S. Konur, M. Gheorghe, C. Dragomir, L. Mierla, F. Ipate, N Krasnogor: **Qualitative and Quantitative Analysis of Systems and Synthetic Biology Constructs using P Systems**, ACS Synthetic Biology, 4(1), 83-92, 2015.

M. Gheorghe, S. Konur, F. Ipate, L. Mierla, M. E. Bakir, M. Stannett: **An Integrated Model Checking Toolset for Kernel P Systems**, Int. Conf. on Membrane Computing 2015, LNCS, to appear.

**Certifications**:

October 2009, **Certificate of Completion for the workshop entitled *“BI-Matching tools implementation using C#”*,** European Education Establishment

October 2010 – February 2011: ***CCNA Exploration: “Network Fundamentals”* (97,6 %)**, CISCO Networking Academy

March 2011 – June 2011: ***CCNA Exploration: “Routing Protocols and Concepts”* (98,0 %)**, CISCO Networking Academy

October 2011 – December 2011: ***CCNA Exploration: “LAN Switching and Wireless”* (97,8 %)**, CISCO Networking Academy

October 2011 - December 2011: **Machine Learning – Statement of Accomplishment**, Andrew NG, Coursera

**Education**

2007 – 2010: **Bachelor degree in Computer Science**, Faculty of Mathematics and Computer Science, University of Piteşti, graduated with the thesis entitled „The Design and Implementation of a Software Compiler using the .Net Platform”.

Admitted **Summa cum Laude**.

Average thesis examination degree: **10.00 out of 10.00**

Average overall examination degree during the Bachelor studies: **9.50 out of 10.00**

September 2009 – **Student at the Ecole Supérieure**

February 2010: **d'Informatique et Applications de Lorraine (ESIAL)**, part of the University of Henri Poincaré Nancy 1, France, as part of the ERASMUM programme

2010 – 2012: **MSc „Advanced Techniques for Information Processing”**, Faculty of Mathematics and Computer Science, University of Piteşti, graduated with the thesis entitled „Towards Formal Verification of Kernel P Systems”.

Admitted **Summa cum Laude**

Average thesis examination degree: **10.00 out of 10.00**

2010 – 2012: **Cisco Networking Academy**, University of Piteşti.

2012 – Present: **Ph.D. in Computer Science „Testing, simulation and verification in Systems and Synthetic Molecular Biology”**, Faculty of Mathematics and Computer Science, University of Piteşti,

Admitted **Summa cum Laude**