



## Curriculum vitae

### Personal information



Surname(s) / First name(s)

**Mironică, Ionuț**

Address

3, G. Calboreanu Street , Bucharest

Telephone

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E-mail

ionut.mironica@gmail.com

Personal webpage

<http://imag.pub.ro/~imironica/>

Nationality

Romanian

Date of birth

11.08.1985

Gender

Male

### Work experience

Dates

October 2013 – until present

Occupation of position held

**Associate Assistant Professor**

Name and address of employer

**University “Politehnica” of Bucharest, Faculty of Electronics, Telecommunications and Information Technology**

Main activities and responsibilities

Responsible with

- “Human-Machine Interface” - course,
- "Computer Programming Fundamentals: C Language" - laboratory,
- "Video Analysis and Processing - Multimedia Indexing"- laboratory,
- “Data Analysis and Machine Learning” – laboratory.

Dates

October 2008 - until present

Occupation of position held

**Software developer / Senior software developer / Team Leader**

Main activities and responsibilities

Analysis and implementation of new software solutions for financial domain: loans, cards, payments, Internet Banking, Core Banking, Mobile Banking.

Technologies:

.NET (Web Forms & MVC 4), HTML5, JavaScript (Ajax Toolkit, JQuery), PHP, SQL Server, Oracle, MySQL, Android.

Name and address of employer

**AlphaBank Romania, [www.alphabank.ro](http://www.alphabank.ro)**

Dates

June 2007 – October 2007

Occupation or position held

**C++, C#, VB.NET software developer**

Main activities and responsibilities

Implementation of new software solutions.

Name and address of employer

**SBP Romania**

### Scholarships

Dates

May 2014 - October 2015

Occupation of position held

**Postdoc researcher**

Main activities and responsibilities

Research domain: Large Scale Content-Based Search of Multimedia Information

Name and address of employer

**University “Politehnica” of Bucharest**

Dates September 2012 – March 2013  
Occupation of position held **Research engineer - PhD scholarship**  
Main activities and responsibilities research and implementation of computer vision algorithms  
Name and address of employer **University of Trento, Italy**

Dates October 2007 - October 2008  
Occupation of position held **Research engineer - scholarship**  
Main activities and responsibilities I have studied and implemented several image processing algorithms: **face detections** (Viola Jones), **face features detection** (eyes, mouth, face angle, skin components)  
Name and address of employer **Fotonation Tessera, Bucharest - www.tessera.com**

### Voluntariate

Dates October 2004 – June 2008  
Occupation or position held Member of **EESTEC**, (The Electrical Engineering Student's European association), an apolitical, non-governmental and non-profit organization which targets and trains through it's activities students from electrical profile Universities, Institutes and Technical Schools in Europe.  
Main activities and responsibilities - Coordinator of Axway - EESTEC Olympics. Axway - EESTEC Olympics - programming contest;  
- I have been involved in organizing the following academic events : "Energy always a challenge" and "Cut the wires, Ride the wave" ( about wireless technologies);  
- I participate at team-building, fund-raising and project management trainings;  
- I was responsible with several technical attributions.  
Name and address of employer Polytechnic University of Bucharest, Street Splaiul Independentei, no. 290, Rectorat Building, room AN 204 bis, District 6, Bucharest, Romania.  
Type of business or sector Apolitical, non-governmental and non-profit organization.

### Education

Dates November 2009 - July 2013  
Title of qualification awarded **PhD - with Excelent honor - the highest PhD Romanian distinction.**  
Subjects with technical character, skills of tem work Research topic: **Intelligent Techniques for Multimedia Databases Collections Analysis and Classification**  
**Domain of interests:**  
- multimedia databases:  
- content based multimedia retrieval systems;  
- relevance feedback algorithms;  
- computer vision;  
- object recognition and localization algorithms.  
- image processing;  
- medical imaging.  
Name and type of organisation providing education and training University "Politehnica" of Bucharest, Faculty of Electronics, Telecommunications and Information Technology

Dates October 2009 - June 2011  
Title of qualification awarded **Master Degree**  
Subjects with technical character, skills of tem work Master: "Databases, Support for Businesses"  
Dissertation topic: "Content-based image retrieval systems" - graduated with **10**.  
Name and type of organization providing education and training University of Economic Studies, Faculty of Economic Informatics and Cybernetics

Dates October 2004 – June 2009  
Title of qualification awarded **Engineer**

Subjects with technical character, skills of tem work „Information Technology” Section

Name and type of organization providing education and training University “Politehnica” of Bucharest, Faculty of Electronics, Telecommunications and Information Technology

Dates September 2000 – June 2004

Title of qualification awarded **Baccalaureate**

Principal subjects/occupational skills covered Mathematics – Computer science.

Name and type of organization providing education and training National College “Dimitrie Cantemir”, Onesti.

**Personal skills and competences**

Mother tongue **Romanian**

Other languages

Self-assessment  
*European level (\*)*

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production		Writing	
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
B1	Basic Listening	A2	Basic Reading	A2	Basic	A1	Basic	A1	Basic Writing

(\*)Common European Framework of Reference for Languages

Social skills and competences

- working in several research and software development teams;
- working with students.

Organizational skills and competences

- **Team Leader** for a software developing team on Alpha Bank;
- **Member of organizing team** for the MediaEval Competition - Benchmarking Initiative for Multimedia Evaluation: Retrieving Diverse Social Images Task, 2013 / 2014/2015;
- **Project coordinator** of "Axway EESTEC Olympics" (programming contest);
- **Member of organizing team** for “Energy always a challenge” (about renewable energy resources) “Cut the wires, Ride the wave” (about wireless technologies) workshops.

Technical skills and competences

- Programming knowledge:**
- Advanced: C#, ASP.NET, HTML 5, PHP, JavaScript, C / C++, Matlab;
  - Beginner: Java (Java fundamentals, AWT, Swing, JSP), Android;
  - Strong algorithms skills.

- Database knowledge:**
- Microsoft Sql Server, MySql, Oracle.

Computer skills and competences

- Windows and Linux;
- Office, Latex.

Other skills and competences

- Awards:**
- First place at the County Level - Olympiad of Mathematics in 2001-2002, 2002-2003;
  - Third place at Siveco Cup 2004, County Level : Physics competition;
  - Second place – “Tagging Task” - MediaEval 2012;
  - First place – “Violent Scenes Detection Task” – MediaEval 2012;
  - First place – “Violent Scenes Detection – Generality task” – MediaEval 2014;

- Certificates:**
- Programming certificate - 2004;
  - certificate Java Fundamentals - Cisco course - 2007;
  - Certificate of English language proficiency - University "Politehnica" of Bucharest, Department of Foreign Languages – 2009;
  - "Database Design and Programming with SQL" - University of Economic Studies, Faculty of Economic Informatics and Cybernetics, 2010.

Academic activity

**Courses**

- "Developing ASP.NET MVC 4 Web Applications" - organized by ProManagement, 2014;
- "Developing in HTML5 with JavaScript and CSS3 Jump Start" - organized by ProManagement, 2013;
- "First Look & and on Lab: What's New for Developers in Microsoft SharePoint 2010", organized by Learning Solutions, 2011.

**Books**

1. B. Ionescu, **Ionuț Mironică**: "The Content-Based Indexing Paradigm in the Context of Multimodal Data" (in romanian - "Conceptul de Indexare Automată după Conținut în Contextul Datelor Multimedia"), Publishing House "Editura MartrixRom", 2013, (112 pages).

**Publications in international journals**

2. Bogdan Ionescu, Klaus Seyerlehner, **Ionuț Mironică**, Constantin Vertan, Patrick Lambert, "An Audio-Visual Approach to Web Video Categorization", Multimedia Tools and Applications, special issue on "Multimedia on the Web", 2012 (ISI Impact Factor 0.91);
3. **Ionuț Mironică**, Radu Dogaru, "A novel feature-extraction algorithm for efficient classification of texture images", Scientific Bulletin of UPB, Series C - Electrical Engineering, 2013.
4. **Ionuț Mironică**, Bogdan Ionescu, Radu Dogaru, "Cellular Automata Bag of Visual Words for Object Recognition", in Scientific Bulletin of UPB, Series C - Electrical Engineering, 2014.

**Publications in international conferences**

5. **Ionuț Mironică**, Ionuț Duță, Bogdan Ionescu, Nicu Sebe, "Beyond Bag-of-Words: Fast Video Classification with Fisher Kernel Vector of Locally Aggregated Descriptors", IEEE International Conference on Multimedia and Expo - ICME, 29 June - 3 July, Torino, Italy, 2015
6. Mats Sjöberg, **Ionuț Mironică**, Markus Schedl, Bogdan Ionescu, "FAR @ MediaEval 2014 Violent Scenes Detection: A Concept-based Fusion Approach", MediaEval Benchmarking Initiative for Multimedia Evaluation workshop MediaEval Benchmarking Initiative for Multimedia Evaluation workshop, CEUR-WS.org, ISSN: 1613-0073, 2014.
7. Bogdan Boteanu, **Ionuț Mironică**, Anca Livia Radu, Bogdan Ionescu, "LAPI @ 2014 Retrieving Diverse Social Images Task: A Relevance Feedback Diversification Perspective", MediaEval Benchmarking Initiative for Multimedia Evaluation workshop MediaEval Benchmarking Initiative for Multimedia Evaluation workshop, CEUR-WS.org, ISSN: 1613-0073, 2014.
8. Cătălin Mitrea, **Ionuț Mironică**, Bogdan Ionescu, Radu Dogaru, "Multiple Instance -based Object Retrieval in Video Surveillance: Dataset and Evaluation", IEEE International Conference on Intelligent Computer Communication and Processing, September 4-6, Cluj-Napoca, Romania, 2014.
9. Bogdan Boteanu, **Ionuț Mironică**, Bogdan Ionescu, "A Relevance Feedback Perspective to Image Search Result Diversification", IEEE International Conference on Intelligent Computer Communication and Processing, September 4-6, Cluj-Napoca, Romania, 2014.
10. **Ionuț Mironică**, Jasper Uijlings, Negar Rostamzadeh, Bogdan Ionescu, "Time Matters! Capturing Temporal Variation in Video using Fisher Kernels", in ACM Multimedia - ACM MM 2013, Barcelona, Spain, octombrie 2013.
11. Negar Rostamzadeh, Gloria Zen, Ionuț Mironică, Jasper Uijlings, Nicu Sebe, "Daily Living Activities Recognition via Efficient High and Low Level Cues Combination and Fisher Kernel Representation", International Conference on Image Analysis and Processing, ICIAP, Napoli, Italia, September, 2013.
12. Radu-Laurențiu Vieriu, **Ionuț Mironică**, Bogdan-Tudor Goraș, "Background Invariant Static Hand Gesture Recognition based on Hidden Markov Models", Signals, Circuits and Systems (ISSCS), June 2013, Iași, Romania.
13. **Ionuț Mironică**, Bogdan Ionescu, Jasper Uijlings, Nicu Sebe, "Fisher Kernel based Relevance Feedback for Multimodal Video Retrieval", ACM International Conference on Multimedia Retrieval - ICMR 2013, Dallas, Texas, USA April 16 - 19, 2013.
14. **Ionuț Mironică**, Bogdan Ionescu, Peter Knees, Patrick Lambert, "An In-Depth Evaluation of Multimodal Video Genre Categorization", IEEE/ACM 11th International Workshop on Content-Based Multimedia Indexing - CBMI, Veszprém, Hungary, June, 2013.
15. **Ionuț Mironică**, Bogdan Ionescu, Christoph Rasche, Patrick Lambert, "A Visual-based Late-Fusion Framework for Video Genre Classification" Signals, Circuits and Systems (ISSCS), June 2013, Iași, Romania.
16. Bogdan Ionescu, Jan Schlüter, **Ionuț Mironică**, Markus Schedl, "A Naïve Mid-level concept base Fusion Approach to Violence Detection in Hollywood Movies", ACM International Conference on Multimedia Retrieval - ICMR 2013, Dallas, Texas, USA April 16 - 19, 2013.

17. Bogdan Ionescu, **Ionuț Mironică**, Klaus Seyerlehner, Peter Knees, Jan Schlüter, Markus Schedl, Horia Cucu, Andi Buzo, Patrick Lambert, "ARF @ MediaEval 2012: Multimodal Video Classification", MediaEval Benchmarking Initiative for Multimedia Evaluation workshop, Pisa, Italy, 4-5 October, 2012.
18. Jan Schlüter, Bogdan Ionescu, **Ionuț Mironică**, Markus Schedl, "ARF @ MediaEval 2012: An Uninformed Approach to Violence Detection in Hollywood Movies", MediaEval Benchmarking Initiative for Multimedia Evaluation workshop Pisa, Italy, 4-5 October, 2012
19. Bogdan Ionescu, Klaus Seyerlehner, **Ionuț Mironică**, Constantin Vertan, Patrick Lambert, "Automatic Web Video Categorization using Audio-Visual Information and Hierarchical Clustering Relevance Feedback", 20th European Signal Processing Conference - EUSIPCO 2012, August 27-31, Bucharest, Romania, 2012.
20. **Ionuț Mironică**, Bogdan Ionescu, Constantin Vertan, "The Influence of the Similarity Measure to Relevance Feedback", 20th European Signal Processing Conference - EUSIPCO 2012, August 27-31, Bucharest, Romania, 2012.
21. **Ionuț Mironică**, Bogdan Ionescu, C. Vertan, "Hierarchical Clustering Relevance Feedback for Content-Based Image Retrieval", IEEE/ACM 10th International Workshop on Content-Based Multimedia Indexing, 27-29 June, Annecy, France, 2012.
22. **Ionuț Mironică**, Constantin Vertan, Dan Cristian Gheorghe, "Automatic Pediatric Otitis Detection by Classification of Global Image Features", International Conference on e-Health and Bioengineering, EHB 2011, Iași, Romania.
23. **Ionuț Mironică**, Constantin Vertan, "A Modified Feature Relevance Estimation Approach to Relevance Feedback in Content-Based Image Retrieval Systems", Signal Processing and Applied Mathematics for Electronics and Communications, August 26-28, 2011, Cluj-Napoca, Romania.
24. **Ionuț Mironică**, Constantin Vertan "A Modified Feature Relevance Estimation Approach to Relevance Feedback in Content-Based Image Retrieval Systems", Signal Processing and Applied Mathematics for Electronics and Communications August 26-28, 2011, Cluj-Napoca, Romania.
25. **Ionuț Mironică**, Radu Dogaru "A comparison between various classification methods for image classification stage in CBIR", Signals, Circuits and Systems (ISSCS), 2011 10th International Symposium on June 2011, Iași, Romania.
26. **Ionuț Mironică**, Constantin Vertan, "An adaptive hierarchical clustering approach for relevance feedback in content-based image retrieval systems", Signals, Circuits and Systems (ISSCS), 2011 10th International Symposium on June 2011, Iasi Romania.
27. **Ionuț Mironică**, Constantin Vertan "Relevance feedback approaches for MPEG-7 content-based biomedical image retrieval", Communications (COMM), 2010 8th International Conference on 10-12 June 2010 Bucharest Romania.

### Benchmarking

2012: MediaEval - Benchmarking Initiative for Multimedia Evaluation (<http://www.multimediaeval.org>)  
 Genre Tagging Task, Placing Task, Affect Task: Violent Scenes Detection and Spoken Web Search Task with LAPI & Speed (Speech and Dialogue), University Politehnica of Bucharest, Romania, DCP, Johannes Kepler University, Linz, Austria, OFAI, Vienna, Austria and LISTIC, University of Savoie, France:

- Tagging Task: Best System (non-organizer connected), **second place** (from 29 runs);
- Violent Scenes Detection Task: Best system, **first place** (from 35 runs).

2014: MediaEval - Benchmarking Initiative for Multimedia Evaluation(<http://www.multimediaeval.org>):

- Violent Scenes Detection - Generality Task: Best system, **first place** (from 30 runs).

### Reviewer

- Journal of Multimedia;
- European Signal Processing Conference - EUSIPCO 2013 and 2014;
- European Workshop on Visual Information Processing - EUVIP 2014.
- International Workshop on Content-Based Multimedia Indexing (CBMI) 2015.