

Universitatea de Vest din Timișoara Nr. Inregistrare .....

În atenția Biroului Electoral Central UVT

# DOSAR de CANDIDATURĂ

la o poziție in

Consiliul Departamentului de Informatică

Candidat: Lect. Univ. Dr. Monica Sancira

Departamentul de Informatică

Facultatea de Matematică și Informatică

## Scrisoare de motivare a candidaturii

## pentru un mandat în Consiliul Departamentului de Informatică

Subsemnata, Monica Sancira, lector doctor la Departamentul de Informatică, Facultatea de Matematică și Informatică am luat decizia de a candida la o poziție de membru în Consiliul Departamentului de Informatică având ca principală motivație dorința de a contribui la dezvoltarea departamentului din care fac parte atât în plan academic cât și în cel al activității de cercetare.

In cursul activității mele în cadrul departamentului de Informatică am fost constat preocupată de îmbunătățirea curiculei cursurilor și adaptarea conținutului cursurilor la noile tendințe din domeniu, în special în domeniul Inteligenței Artificiale. Deasemenea am fost implicata în diverse activitați care vizează imaginea, și promovarea departamentului.

## Doresc să mă implic în:

- Corelarea disciplinelor din planul de învatamant între ele pentru o aliniere sustenabilă cu industria IT.
- Atragere firmelor în vederea unor colaborari cu domeniul academic.
- Elaborarea şi punerea în practică a unor strategii de colaborare cu profesori şi
  cercetători din alte părti ale lumii (prin participarea la evenimente stiintifice şi
  efectuarea unor vizite la universități din Europa cât şi de pe alte continente)

Timișoara, 13.10.2023



Curriculum Vitae Monica Sancira



#### PERSONAL INFORMATION

## Monica Sancira





#### Lecturer

West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science Department

Blvd. V. Parvan 4, Timisoara, Timis, 300223, Romania

Tel: +40-(0)256-592111 Fax: +40-(0)256-592310 Website: www.uvt.ro

- Algorithms and Data Structures II (Laboratory)
- Advanced Data Structures (Lecture + Laboratory)
- Graph Theory and Combinatorics (Laboratory + Seminar)
- Artificial Intelligence (Laboratory)
- Programming III (Laboratory)
- Databases II (Lecture + Laboratory)

**Business or sector Education** 

#### 1.10.2012 - 30.09.2017

#### Associate Assistant

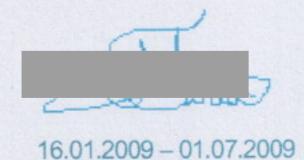
West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science Department

Blvd. V. Parvan 4, Timisoara, Timis, 300223, Romania

Tel: +40-(0)256-592111 Fax: +40-(0)256-592310 Website: www.uvt.ro

- Basics of Computer Science (Laboratory + Seminar)
- Formal Languages (Laboratory + Seminar)
- Graph Theory and Combinatorics (Laboratory + Seminar)
- Data Structures(Laboratory)
- Artificial Intelligence (Laboratory)

**Business or sector Education** 



### Assistant Manager

Romanian-Swiss Multimedia Institute

Blvd. Republicii, 9, Timisoara, Timis, cod postal 300159, Romania

Tel.: +40 730 00 22 93 E-mail:offfice\_tm@iim.ro Website:www.iim.ro

- Marketing
- Management
- Trainer
- Courses Organizer

Business or sector Education and Training





05.05.2008 - 22.09.2008

#### Trainer

Romanian-Swiss Multimedia Institute

Future Alleey 22, Deva, Hunedoara, 330075, Romania

Tel.: +40 771 60 77 30 Fax: +40 254 20 62 10 E-mail:offfice@iim.ro Website:www.iim.ro

- Trainer in Phare Projects
- Courses Organizer

Business or sector Education and Training

#### **EDUCATION AND TRAINING**

#### 04.2014 - 12.2015

### PostDoc in Computer Science

West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science

Department, Romania

- Artificial Intelligence
  - Neural and Evolutionary Computing
- Financial Analysis (Technical, Fundamental, Behaviour and Risk Analysis)

Project Title: Intelligent System for Stock Market Forecasting

#### 10.2010 - 10.2013

## Doctor in Computer Science

West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science Departmen

- Artificial Intelligence
- Neural and Evolutionary Computing
- Financial Analysis (Technical, Fundamental, Behaviour and Risk Analysis)

PhD Thesis: Recommendation System based on Multi-Agent Models for Stock Market Trading

#### 10.2008 - 06.2010

## Master in Computer Science

West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science Departmen

- Artificial Intelligence
- Distributed Systems
- Neural and Evolutionary Computing
- Automated Theorem Proving

Master: Artificial Intelligence and Distributed Computing

#### 10.2008 - 06.2010

#### Master in Economy

West University of Timisoara, Faculty of Economics and Business Administration, Economical Informatics De Romania

- Multidimensional analysis of financial-banking data (OLAP)
- Stock Market
- Design and Analysis of Financial-Banking Information Systems
- Security of Financial-Banking Systems

Master: Financial - Banking Information Systems

#### 10.2005 - 06.2008

### Bachelor Degree in Computer Science

West University of Timisoara, Faculty of Mathematics and Computer Science, Computer Science Department, Romania

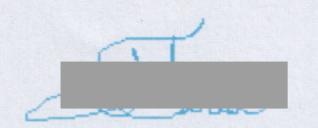
- Artificial Intelligence
- Programming (C, C++, Java)
- Logical and Functional Programming
- Algorithmic

Bachelor: Computer Science in English

#### Pedagogical Diploma (Module I and II)

West University of Timisoara, Department of Teacher Training, Romania





10.2005 - 06.2009 01.2009 - 07.2009

- Pedagogy
- Pedagogical Practice
- Sociology
- Classroom Management
  - Design and management of educational programs

## Web Designer (40 credits ETCS)

Haute Ecole Arc in collaboration with Romanian-Swiss Multimedia Institute, Swiss - Romania

- Photoshop
- Flash
- HTML
- CSS

## 01.2009 - 07.2009 Web Programmer (40 credits ECTS)

Haute Ecole Arc in collaboration with Romanian-Swiss Multimedia Institute, Swiss - Romania

- PHP
- MySql
- Javascript
- Flash

#### PERSONAL SKILLS

#### Mother tongue(s) Romanian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2
B2	B2	B2	B2	B2
C1	C1	C1	C1	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user

English

French

Spanish

Common European Framework of Reference for Languages

#### Communication skills

good communication skills gained through my experience as trainer at Romanian-Swiss
 Multimedia Institute and associate assistant at West University of Timisoara

#### Organisational / managerial skills

 good organisational and managerial skills gained through my experience as assistant manager at Romanian-Swiss Multimedia Institute

#### Job-related skills

- good knowledge of web designing and web programming gained through my experience as a student at Romanian-Swiss Multimedia Institute
- good knowledge of formal languages gained through my experience as an associate assistant at West University of Timisoara
- good knowledge of Java and Oracle administration gained through my experience as an associate assistant at West University of Timsioara
- good knowledge of graph theory and combinatorics gained through my experience as an associate assistant at West University of Timisoara
- excellent knowledge in forecasting the market behaviour gained through my experience as
   Phd student at West University of Timisoara

#### Experience with

### Computer skills

- Eclipse, NetBeans
- Maple, Mathematica
- Jade, Jess
- GNU-Prolog, SWI-Prolog



- CLisp Knowledge of:
- ORACLE, MySQL
- C, C++, Java
- HTML, CSS, PHP, Javascript, Flash, XML
- Expert Systems, Multi-Agent Systems, Text Mining, Technical, Fundamental, Behaviour and Risk Analysis

#### ADDITIONAL INFORMATION

Publications
Presentations
Projects
Conferences
Seminars
Honours and awards
Memberships
References

The following list contains the academic papers I have (co)authored.

- Conference papers:
- Monica Tirea, Ioan Tandau, Viorel Negru. Multi-agent Stock Trading Algorithm Model. In Dongming Wang, Viorel Negru, Tetsuo Ida, Tudor Jebelean, Dana Petcu, Stephen M. Watt, and Daniela Zaharie, editors, 13th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2011, IEEE Computer Society, pages 365-372, Timisoara, Romania, September 26-29, 2011. (ISI Proceedings, Rank C)
- 2. Monica Tirea, Ioan Tandau, Viorel Negru. Multi-Agent Stock Trading Algorithm A Neural Network Approach. In Manuel Graña, Carlos Toro, Jorge Posada, Robert J. Howlett, and Lakhmi C. Jain, editors, Advances in Knowledge-Based and Intelligent Information and Engineering Systems 16th Annual KES Conference, KES 2012, Frontiers in Artificial Intelligence and Applications, IOS Press, pages 706-715, San Sebastian, Spain, September 10-12, 2012. (ISI Proceedings, Rank B)
- 3. Monica Tirea, Ioan Tandau, Viorel Negru. Stock Market Multi-Agent Recommendation System Based on the Elliott Wave Principle. In Gerald Quirchmayr, Josef Basl, Ilsun You, Lida Xu, and Edgar Weippl, editors, Multidisciplinary Research and Practice for Information Systems IFIP WG 8.4, 8.9/TC 5 International Cross-Domain Conference and Workshop on Availability, Reliability, and Security, CD-ARES 2012, Lecture Notes in Computer Science, Volume 7465, Springer, Prague, Czech Republic, August 20-24, 2012. (BDI Proceedings, LNCS, Rank C)
- 4. Iuhasz Gabriel, Monica Tirea, Viorel Negru. Neural Network Predictions of Stock Price Fluctuations. In Dongming Wang, Viorel Negru, Tetsuo Ida, Tudor Jebelean, Dana Petcu, Stephen M. Watt, and Daniela Zaharie, editors, 14th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2012, IEEE Computer Society, pages 505-512, Timisoara, Romania, September 26-29, 2012. (ISI Proceedings, Rank C)
- Monica Tirea, Viorel Negru. Stock Market Analysis Strongest Performing Stocks Influence on an Evolutionary Market. In Vesna Luzar-Stiffler, and Iva Jarec, editors,,35th International Conference on Information Technology Interfaces, ITI 2013, IEEE Computer Society, pages 263-270, Cavtat/Dubrovnik, Croatia,June 24-27, 2013. (ISI Proceedings, Rank C)(Best Student Paper Award)



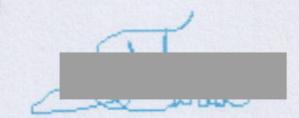


Publications
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References

The following list contains the academic papers I have (co)authored.

- Conference papers:
- Monica Tirea, Viorel Negru. Classifying and Quantifying Certain Phenomena Effect on a Stock Market Portfolio. In IEEE 11th International Symposium on Intelligent Systems and Informatics, SISY 2013, IEEE Computer Society, pages 363-368, Subotica, Serbia, September 26-28, 2013.(ISI Proceedings, Rank C)
- 7. Monica Tirea, Viorel Negru. Investment Portfolio Optimization based on Risk and Trust Management. In IEEE 11th International Symposium on Intelligent Systems and Informatics, SISY 2013, IEEE Computer Society, pages 369-374, Subotica, Serbia, September 26-28, 2013. (ISI Proceedings, Rank C)
- 8. Monica Tirea, and Viorel Negru. Managing Risk Behavior on an Evolutionary Market A Risk Limits and Value-at-Risk Measures Approach. In 15th International Symposium on Symbolic and Numeric Algorithms for Scientic Computing, SYNASC 2013, IEEE Computer Society, pages 543-550, Timisoara, Romania, September 23-26, 2013.(ISI Proceedings, Rank C)
- 9. Monica Tirea, and Viorel Negru. Traders Behavior Effect on Stock Price Evolution. In 15th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2013, IEEE Computer Society, pages 273-280, Timisoara, Romania, September 23-26, 2013.(ISI Proceedings, Rank C)
- Monica Tirea, and Viorel Negru. Intelligent Stock Market Analysis System A Fundamental and Macro-economical Analysis Approach. In 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2014, IEEE Computer Society, pages 519-526, Timisoara, Romania, September 22-25, 2014.(ISI Proceedings, Rank C)
- 11. Monica Tirea, and Viorel Negru. Text Mining News System Quantifying Certain Phenomena Effect on the Stock Market Behavior. In 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2015, IEEE Computer Society, pages 391-398, Timisoara, Romania, September 21-24, 2015.(ISI Proceedings, Rank C)
- 12. Monica Tirea, and Viorel Negru. Stock Market Trading Strategies Applying Risk and Decision Analysis Models for Detecting Financial Turbulence. In 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2015, IEEE Computer Society, pages 216-223, Timisoara, Romania, September 21-24, 2015(ISI Proceedings, Rank C)
- 13. Monica Tirea, and Viorel Negru. Behavioral Trading System Detecting Crisis, Risk and Stability in Financial Markets. In 18th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, SYNASC 2016, IEEE Computer Society, pages 279-286, Timisoara, Romania, September 24-27, 2016.(ISI Proceedings, Rank C)
- Participation:
- 1. Doctoral Students Session, 14-16 June 2012
- 2. Evolutionary Computing in Organization and Data Mining Summer School, 18-23 June 2012
- 3. Al-MAS Winter Olympics, 23 February 2013
- Research Stage at Artificial Intelligence Research Institute of the Spanish Research Council(IIIA-CSIC), Cerdanyola, Catalonia, Spain, Period: 19 July -31 August 2015
- 5. 2nd International Winter School on Big Data, Bilbao, Spain, 8-12 February 2016
- 6. International Summer School on Web Science and Technology, Bilbao, Spain, 18-22 July 2016
- 7. Organizing Commitee Chair International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, September , 2016-2019, Timisoara, Romania
- 8. Co-Chair 4th International Winter School on Big Data, Timisoara, Romania, 22-26 January 2018

15.10.2019



## Declarație

Subsemnata, Monica Sancira, lector la Departamentul de Informatică, Facultatea de Matematică și Informatică, Universitatea de Vest din Timișoara, declar pe proprie răspundere că nu am fost nici lucrător și nici colaborator al securității.

Timișoara, 13.10.2023

