



Report on

THE SOUTH-EASTERN EUROPEAN MULTI-AGENT SYSTEMS SUMMER SCHOOL

<http://see-mas2010.cs.pub.ro/>

FACULTY OF AUTOMATIC CONTROL AND COMPUTERS

University POLITEHNICA of Bucharest, Romania

5-10 July, 2010

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The first edition of the South Eastern European Multi-Agent Systems Summer School was organized by the Laboratory of Artificial Intelligence and Multi-Agent Systems (AI-MAS) of the Department of Computer Science, University Politehnica of Bucharest, and the IEEE Romania Section Computational Intelligence Society Chapter. The School was hosted by the Faculty of Automatic Control and Computers of UPB, one of the most important centers for education and research in IT, in Romania, with the support of SEE-MAS sponsors.

1. SEE-MAS sponsors

The International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS)

Cost Action IC0801 Agreement Technologies

Faculty of Automatic Control and Computers, University “Politehnica” of Bucharest (UPB)

2. Aim

SEE-MAS 2010 Summer School aimed to enhance students’ knowledge in the field of multi-agent systems and to boost their research skills, by allowing them to attend lecture and tutorials held by well known researchers in the field, as well as to participate in the student paper workshop and discussions.

The school provided a good opportunity to get to know other people working in the field, to meet prominent researchers, and to establish contacts through social interactions that may lead to research collaborations in the future.

The purpose of the school was to provide surveys on the most relevant topics of MAS, to present modern perspectives and underlying technologies, and to identify the pertinent issues that form new directions of research. The participant students will be able to gain a range of theoretical and practical skills necessary to develop complex, real-life agent based applications.

3. Programme

Venue & registration: July 4, 2010

School: July 5-9, 2010

Trip to Bucegi Mountains: July 10, 2010

Mon 5 July	Tue 6 July	Wed 7 July	Thu 8 July	Fri 9 July	Sat 10 July
9:00-13:00 <u>M. Luck</u> Introduction to Multi-agent Systems	9:00-13:00 <u>J.J. Meyer</u> Logical Foundations of Multi-agent Systems	9:00-13:00 <u>S. Kraus</u> Automated Negotiation	9:00-13:00 <u>W. Jamroga</u> Reasoning About Strategies of Agents	9:00-12:00 <u>E. Oliveira</u> Agent Advanced Features and Electronic Institutions for B2B Interoperability	
13:00-14:30 Lunch	13:00-14:30 Lunch	13:00-14:30 Lunch	13:00-14:30 Lunch	12:00-13:30 Lunch	
		14:30-17:30 <u>S. Kraus</u> Human-Computer Negotiation: Learning from Different Cultures			
14:30-18:30 <u>A. El Fallah</u> <u>Seghrouchni</u> Multi-Agent Planning and coordination in MAS	14:30-18:30 <u>M. Ganzha & M. Paprzycki</u> Software Agents as Resource Brokers in Grid	14:30-18:30 <u>A. Seghrouchni</u> Programming principles of MAS	14:30-18:30 <u>L. Vercouter</u> Computational Trust and Reputation Models	13:30-16:30 Student session	9:00-18:00 Travel to Bucegi Mountains
19:30-22:00 Get to know party		17:30-18:30 Student session		16:30-17:30 Conclusions and round table	
				20:00-24:00 Cocktail	

4. Speakers & talks

Michael Luck, King's College London



Michael Luck is Professor of Computer Science in the Department of Computer Science at King's College London, where he leads the Agents and Intelligent Systems group and undertakes research into agent technologies and intelligent systems. His work has sought to take a principled approach to the development of practical agent systems, and spans formal models and theories as well as practical applications. Recent work has been directed at norms and institutions, declarative programming of agent systems, and industrial deployment and technology forecasting. He is currently leading work at King's on the IST CONTRACT project, concerned with distributed electronic business systems on the basis of dynamically generated, cross-organisational contracts.

Introduction to Multi-agent Systems

In this talk I will provide an introduction to intelligent agents and multi-agent systems, covering the motivation for the use of agents, BDI concepts, agent interaction, applications and future prospects.

John Jules Meyer, Utrecht University, The Netherlands



Prof.dr. John-Jules Ch. Meyer studied mathematics with computer science and digital signal processing at Leyden University. In 1985 he obtained his Ph.D. from the Vrije Universiteit in Amsterdam on a thesis entitled "Programming Calculi Based on Fixed Point Transformations", a subject in theoretical computer science. From 1988 to 1993 he was a professor at the computer science department at the VU Amsterdam holding a chair in "Logic for distributed systems and artificial intelligence". From 1989 to 1993 he also was a professor of theoretical computer science at the Katholieke Universiteit Nijmegen. Since 1993 he has been a professor at the computer science department of Utrecht University (UU). At the moment he is heading the Intelligent Systems Group of the Department of Computing and information Sciences of the UU.

Logical Foundations of Multi-agent Systems

In this tutorial I will treat the basics of modal logic, and how they are applied to describe agent attitudes and multi-agent systems. Topics that will be addressed are basic modal logic, epistemic logic, temporal logic, dynamic logic, deontic logic as well as BDI logic, Common Knowledge and Joint Intentions, time permitting. I will end with non-normal modal logic (neighborhood semantics), which provides the basis for MAS logics such as Coalition Logic.

Wojciech Jamroga, University of Luxemburg, Grand Duchy of Luxemburg



Wojciech Jamroga did his PhD at the University of Twente (the Netherlands), and his habilitation at the Clausthal University of Technology (Germany). Currently he is a member of the Individual and Collective Reasoning Group at the University of Luxemburg. He works mainly on logical and game-theoretical aspects of multi-agent systems.

His teaching record includes four courses at ESSLI (European Summer School on Logic, Language and Information: 2006, 2007, 2008, and forthcoming in 2010), and four courses at EASSS (European Agent Systems Summer School: 2006, 2007, 2008, and 2009).

Reasoning about Strategies of Agents

A multi-agent system can be seen as a game where agents act to obtain a desirable outcome. Thus, when reasoning about such systems, agents' strategies (and their outcomes) must be taken into account. On one hand, these issues have been studied extensively in game theory. On the other hand, formal logic is widely regarded as a foundation for specification, verification and reasoning about MAS. In this course, we study logical formalisations of agents in game-like scenarios.

Sarit Kraus, University of Maryland, US and Bar Ilan University, Israel



Sarit Kraus (Ph.D. Computer Science, Hebrew University, 1989) is a Professor of Computer Science at Bar-Ilan University and Adjunct Professor at the Institute for Advanced Computer Studies, University of Maryland (UMIACS). Her research interests are in multi-agent systems, specially negotiation and cooperation among agents, open agent environments, learning and information agents, personalization and optimization of complex systems.

Automated negotiators: Agents interacting with other automated agents and with humans

Negotiation is an important mechanism for resolving conflicts and is prevalent in human interaction in many different settings, such as diplomatic relations, electronic commerce, and personal relationships. In this tutorial we will present the key approaches for designing automated negotiators. These include game theoretic and heuristics and their integration with machine learning methods. Game theory provides an elegant mathematical framework for modeling and analyzing strategic interaction between self-interested fully rational agents. However, implementation of these models for agents that need to interact with people is problematic since people are rationally bounded and affected by social factors.

Human-Computer Negotiation: Learning from Different Cultures

Negotiation is a process by which interested parties confer with the aim of reaching agreements. The ability to negotiate successfully is critical for many social interactions. The dissemination of applications such as the Internet across geographical and ethnic borders are opening up opportunities for computer agents to negotiate with people of diverse cultural and organizational affiliation. These automated negotiators should be able to proficiently interact and collaborate with their human partners.

Amal El Fallah Seghrouchni, University Pierre et Marie Curie, France



Amal El Fallah Seghrouchni is Full Professor at the University Pierre and Marie Curie (Paris – France). She is researcher at LIP6 laboratory (University Pierre and Marie Curie and CNRS – UMR7606) where she heads the Multi-Agent Systems team. She is also the president of the French "Collège SMA" which federates French teams working in the domain of intelligent agents and Multi-Agent Systems.

Multi-Agent Planning and coordination in MAS

One of the major interests of Multi-Agent Systems (MAS) is their ability to handle distributed planning by coordinating agents' plans. Coordination requires both an adequate plan representation and an efficient interaction between agents. Based on information exchange (e.g. data, plans), the interaction allows agents to update their own plans by considering the exchanged information. Coordination generally produces two effects: cancelling negative interactions (e.g. harmful actions) and taking advantage of helpful interactions (e.g. handling redundant actions). Agents organize their activities and update their plans in order to cooperate and avoid conflicts.

Programming principles of MAS

Intelligent agents and multi-agent systems (MAS) play an important role in today's software development. Indeed, they constitute an interesting paradigm to build distributed intelligent systems and offer a relevant abstraction to design complex applications at industrial level. Since almost two decades, the MAS community has developed a large and rich panel of concepts, architectures, interaction techniques, and general approaches to the analysis and the specification of MAS. The aim of this presentation is to survey the main principles of MAS programming and to highlight some of their links with (distributed) artificial intelligence concepts, distributed systems techniques; and software engineering methodologies.

Eugénio Oliveira, Universidade do Porto, Portugal

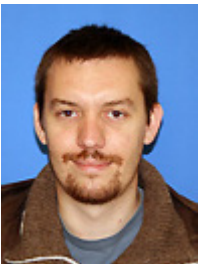


Eugénio Oliveira studied at the Universities of Coimbra and Porto in Portugal where he got his degree in Electrotechnical Engineering in the seventies. He immediately went to Switzerland, near Zurich, where he was enrolled as R&D Engineer at Brown, Boveri, C. (now ABB) Electronic Labs. He got his PhD at the New University of Lisbon with a thesis on Knowledge Engineering and Logic Programming applications (1984). Eugénio Oliveira was invited as a Guest Academic at IBM IEC in La Hulpe, near Brussels (84-85) teaching Knowledge Based Systems and launching projects on Logic Programming and Expert Systems. He started, in 1987, the Distributed Artificial Intelligence & Robotics Group at the Faculty of Engineering of the University of Porto and, in the next year, he was co-founder of LIACC- AI and Computer Science Lab at the University of Porto. LIACC has about 60 members in 2010. LIACC includes groups working on Multi-Agent Systems, Intelligent Robotics and Computer Science.

Agent Advanced Features and Electronic Institutions for B2B Interoperability

Electronic Institutions (EI) can provide a good environment as well as appropriate services to facilitate B2B Interoperability. In my tutorial I will elaborate on different aspects that have to be present, through the EI, to make easier Virtual Enterprises formation and operation stages. I will elaborate on how to design a Normative Environment to help on electronic contract monitoring, how to provide an adaptive negotiation protocol and on Computational Trust and Reputation Models that may help in the partners' selection operation.

Laurent Vercouter, École Nationale Supérieure des Mines de Saint Etienne, France



Dr. Laurent Vercouter is an assistant professor and a member of the multiagent systems research department at the Ecole des Mines of Saint-Etienne in France. The global research theme of L. Vercouter is decentralized multiagent systems and more specifically trust and reputation in MAS. In this field he developed in collaboration with Guillaume Muller a reputation model for the detection and exclusion of liars in P2P systems and published several papers internationally. In 2006, he worked as an invited researcher at the University of Sao Paulo on ontological aspects of reputation.

He is involved in the national project ForTrust about the formalization of trust for multiagent systems and a funding member of the international ART Testbed group.

Computational Trust and Reputation Models

The talk will present recent existing works in trust and reputation systems for multi-agent systems. First, the typical problems tackled by trust and reputation models are presented. We show that they are different problems that the ones tackled by security techniques and that security and trust must be considered as complementary approaches. The foundations of trust models are then explained. Starting from sociological studies, we identify the main concepts involved in trust models. Then we will survey the main existing trust models in MAS covering both the socio-cognitive and the game theoretical approaches. Reputation systems will also be presented to show how they can contribute to (semi-)automatic trust decision processes. Finally, the talk will be concluded with an overview of current open research problems of the field.

Maria Ganzha, Marcin Paprzycki, Polish Academy of Sciences, Poland



Marcin Paprzycki (Senior Member of the IEEE, Senior Member of the ACM, Senior Fulbright Lecturer, IEEE CS Distinguished Visitor) has received his M.S. Degree in 1986 from Adam Mickiewicz University in Poznań, Poland, his Ph.D. in 1990 from Southern Methodist University in Dallas, Texas and his Doctor of Science Degree from Bulgarian Academy of Sciences in 2008. His initial research interests were in high

performance computing and parallel computing, high performance linear algebra in particular. Over time they evolved toward distributed systems and Internet-based computing; in particular, agent systems. He has published more than 200 research papers and was invited to Program Committees of over 300 international conferences. He is on editorial boards of 14 journals and a book series.



Maria Ganzha obtained MS and her Ph.D. in Applied Mathematics from Moscow State University, Moscow, Russia in 1987 and 1991 respectively. Her initial research interests were in the area of differential equations, solving mixed wave equations in space with disappearing obstacles in particular, currently she works in the areas of software engineering, distributed computing and agent systems in particular. She has published more than 70 research papers and is on editorial boards of 5 journals and a book series and was invited to Program Committees of over 40 conferences.

Software Agents as Resource Brokers in Grid

It is a widely held belief that software agents will become the next revolution in information technology. One of the areas where they are expected to play an important role is the Grid. Claims to this effect, as well as research results can be found in work of B. diMartino, O. Rana, B. Prasad and others. In our work we have taken a different approach to these researchers and proposed that agent teams should be utilized for resource brokering and management. In this way, software agents become the "brain" for the Grid "brawn." The aim of the presentation will be to outline the assumptions underlying our work, introduce our system and discuss how agents representing users interact with the agent teams, and how the high-level intelligent infrastructure can utilize the actual Grid middleware to execute a job.

5. COMMITTEES

ADVISORY BOARD

- Michael Luck, King's College London, UK
- John Jules Meyer, Utrecht University, The Netherlands
- Sarit Kraus, University of Maryland, US and Bar Ilan University, Israel
- Amal El Fallah Seghrouchni, Univ Pierre et Marie Curie, France
- Eugénio Oliveira, Universidade do Porto, Portugal
- Wojtek Jamroga, University of Luxemburg, Luxemburg

STUDENT SESSION PC

- Costin Bădică, University of Craiova, Romania
- Valentina Balaş, "Aurel Vlaicu" University of Arad, Romania
- Olivier Boissier, ENSM-Saint-Etienne, France
- Amal El Fallah Seghrouchni, Univ Pierre et Marie Curie, France
- Denis Enăchescu, University of Bucharest, Romania
- Adina Magda Florea, University "Politehnica" of Bucharest, Romania
- Maria Gazha, Polish Academy of Sciences, Poland
- John Jules Meyer, Utrecht University, The Netherlands
- Viorel Negru, West University of Timisoara, Romania
- Marcin Paprzycki, Polish Academy of Sciences, Poland

ORGANIZING COMMITTEE

- Adina Magda Florea, AI-MAS Laboratory, UPB, Romania
- Theodor Borangiu, CIMR & UPB, Romania
- Irina Mocanu, AI-MAS Laboratory, UPB, Romania
- Şerban Radu, AI-MAS Laboratory, UPB, Romania
- Andrei Mogoş, AI-MAS Laboratory, UPB, Romania
- Anca Bălănel, AI-MAS Laboratory, UPB, Romania
- Andrei Ciortea, AI-MAS Laboratory, UPB, Romania
- Alexandra Ciortan, AI-MAS Laboratory, UPB, Romania
- Costin Caval, AI-MAS Laboratory, UPB, Romania
- Octavian Voicu, AI-MAS Laboratory, UPB, Romania
- Mihai Trăscău, AI-MAS Laboratory, UPB, Romania
- Mihaela Puică, AI-MAS Laboratory, UPB, Romania
- Silvia Anton, CIMR & UPB, Romania

6. Student session

During the school, a Student Session/Workshop was organized in which students were invited to submit their contributions in the form of research papers. The Student papers workshop was meant to encourage young researchers to present their ongoing work and receive feedback from leading researchers in the field as well as interact with their fellow students.

The submitted papers went through a selection process conducted by the program committee. Accepted paper submissions had a 20 minute slot allocated for presentation and discussions within the student sessions, which were held on Wednesday July 7 and Friday, July 9.

The following papers were selected and presented:

- Mihnea Scafes, University of Craiova, Software Engineering Department - Challenges of Complex Negotiations
- Sorin Ilie, University of Craiova, Software Engineering Department - Distributed Multi-Agent Approach to Solving The Traveling Salesman Problem Using Ant Colony Optimization
- Polberg Sylwia and Shupantha Kazi Imam, Warsaw University of Technology, Faculty of Mathematics and Information Science - Developing Bots for the Diplomacy Game
- Iryna Kamenieva, Kharkiv National University of Radioelectronics - Multi-Agent Data Mining Repository
- Antoniu Ștefan and Ioana A. Stănescu, Advanced Technology Systems, Târgoviște, Romania - How Intelligent Agent Technology Impacts upon Decision Support Systems?
- Cristian Gratie, Faculty of Automatic Control and Computers, University "Politehnica" of Bucharest, - Formal Model for the Unified Study of Extension-Based Semantics
- Andrei Olaru - Faculty of Automatic Control and Computers, University "Politehnica" of Bucharest - Agent Based Information Sharing For Ambient Intelligence

7. Registration & grants

The registration fees covered attendance to the school (including School lecture notes = Slides Book, School programme, Idea space folder, pen and notebook), lunch and coffee breaks, and social programme (Get to know party, Cocktail and Travel to the mountains). Registration fees were 150 Euro – Early registration, 200 Euro – Late registration and 250 – Onsite registration.

There was an important number of grants offered to the students. Most of the grants covered the registration fees, some covered also the accommodation, and some also the travel. The financing given by the sponsors was vital in order to be able to offer these grants to participants from a region in which financial means are scarce. Accommodation was ensured in the UPB university campus, lunch and coffee breaks were organized by the faculty Cantina.

To apply for a grant, the applicants had to send to the organizers:

- Name, affiliation, email
- Curriculum Vitae
- Motivation letter, including their research interests

8. Participants

PhD Students

Ovidiu Aritoni	Western University Timisoara, Romania
Sorin Ilie	University of Craiova, Romania
Cristian Gratie	University "Politehnica" of Bucharest, Romania
Din Ramona	University "Politehnica" of Bucharest, Romania
Andrei Mogos	University "Politehnica" of Bucharest, Romania
Bianca Roman	University of Bucharest, Romania

Elia Dragomir	Petroleum-Gas University of Ploiesti, Romania
Andrei Olaru	University "Politehnica" of Bucharest, Romania
Ioana Stanescu	Artificial Intelligence Research Institute, Romanian Academy
Mihnea Scafes	University of Craiova, Romania
Monica Voinescu	University "Politehnica" of Bucharest, Romania
Victor Munteanu	Western University Timisoara, Romania
Serban Radu	University "Politehnica" of Bucharest, Romania
Denis Music	University Dzemal Bijedic, Bosnia si Herzegovina
Iryna Kamenieva	Kharkiv National University of Radioelectronics, Ucraina
Dejan Mitrovic	University of Novi Sad, Serbia
Evgeni Simeonov	Ruse University, Bulgaria
Valentin Lungu	University "Politehnica" of Bucharest, Romania
Radu Casian Mihailescu	Rey Juan Carlos University, Madrid, Spania

Master Students

Octavian Voicu	University "Politehnica" of Bucharest, Romania
Anca Balanel	University "Politehnica" of Bucharest, Romania
Mihai Trascau	University "Politehnica" of Bucharest, Romania
Andrei Ciortea	University "Politehnica" of Bucharest, Romania
Antoniuf Stefan	Universitatea Valahia Targoviste, Romania
Tudor Berariu	University "Politehnica" of Bucharest, Romania
Alexandru Sorici	University "Politehnica" of Bucharest, Romania
Alin Danciu	University "Politehnica" of Bucharest, Romania
Andrei Ismail	University "Politehnica" of Bucharest, Romania
Alexandra Ciortan	University "Politehnica" of Bucharest, Romania
Shupantha Kazi Imam	Warsaw University of Technology, Polonia
Sylwia Polberg	Warsaw University of Technology, Polonia
Georgi Nechovski	Ruse University, Bulgaria
Ventsislav Varbanov	Ruse University, Bulgaria

Other participants

Irina Mocanu, PhD	University "Politehnica" of Bucharest, Romania
Mihaela Oprea, PhD	Petroleum-Gas University of Ploiesti, Romania

Special participation of:

Prof. Costin Badica	University of Craiova, Romania
Prof. Andreea Munteanu	University of Bucharest, Romania

Speakers

Michael Luck	King's College, London, UK
John Jules Meyer	Utrecht University, Utrecht, The Netherlands
Sarit Kraus	University of Maryland, US; Bar-Ilan University, Israel
Amal El Fallah Seghrouchni	Universitatea Pierre et Marie Curie, Paris, France
Wojtek Jamroga	University of Luxembourg, Luxembourg
Eugenio Oliveira	Universidade de Porto, Portugal
Laurent Vercouter	Ecole Nationale Supérieure des Mines de SE, France
Maria Ganzha	Polish Academy of Sciences, Poland
Marcin Paprzycki	Polish Academy of Sciences, Poland

Participants details

id	firstname	lastname	email	city	phone	country	position	department	university	fees	grant	paper	arrival	departure	accommodation	trip
1	Octavian	Voicu	octavian.voicu@gmail.com	Bucharest	+40740018671	Romania	msc	Computer Science	University Politehnica of Bucharest	1	0	0	2010-07-04	2010-07-11	no	1
2	Anca	Balanel	anca.balanel@gmail.com	Bucharest	+40725892669	Romania	msc	Computer Science	University Politehnica Bucharest	1	0	0	2010-07-04	2010-07-11	no	1
3	Sylwia	Polberg	sylwia.polberg@gmail.com	Warszawa	+48 794 505 069	Poland	msc	Faculty of Mathematics and Computer Science	Warsaw University of Technology	3	1	1	2010-07-04	2010-07-11	single	1
4	Mihai	Trăscău	mihai.trascau@gmail.com	București	+40-740309985	Romania	msc	Computer Science	Universitatea „Politehnica” București	1	0	0	2010-07-05	2010-07-10	no	0
5	Aritoni	Ovidiu Constantin	oaritoni@info.uvt.ro	Pischia	0728433466	Romania	phd	Departement of Computer Science	Western University of Timisoara	2	0	0	2010-07-04	2010-07-11	single	1
6	Iryna	Kamenieva	irina.kamenieva@gmail.com	Kharkiv	+380952087879	Ukraine	phd	Computer Science	Kharkiv National University of radioelectronics	3	1	1	2010-07-04	2010-07-11	single	1
7	Sorin	Ilie	silie@software.ucv.ro	Craiova	0763128520	Romania	phd	Software Engineering	University of Craiova	2	1	1	2010-07-04	2010-07-09	single	0
8	Dejan	Mitrovic	dejan.mitrovic@dmi.uns.ac.rs	Novi Sad	+381-66-355-255	Serbia	phd	Department of Mathematics and Informatics, Faculty of Sciences	University of Novi Sad	3	0	0	2010-07-04	2010-07-09	single	0
9	Olga NO visa, did not come	Pustovalova	pustovalova.olga@gmail.com	Chisinau	+37368090605	Moldova	phd	Mathematics and Computer Science	State University of Moldova	1	0	0	2010-07-05	2010-07-10	single	1

10	Cristian	Gratie	cgratie@yahoo.com	Ramnicu Valcea	+40721986039	Romania	phd	Computer Science	University "Politehnica" of Bucharest	1	1	2010-07-04	2010-07-11	no	1	
11	Din	Ramona Elena	din.ramona@gmail.com	Bucharest	(+40) 765.501.302	Romania	phd	Automatic Control and Industrial Informatics	University "Politehnica" of Bucharest	1	0	2010-07-05	2010-07-09	no	1	
12	BIANCA	ROMAN	biancaroman2005@yahoo.com	Bucharest	0741085345	Romania	phd	Computer Science	University of Bucharest	1	0	2010-07-05	2010-07-10	no	0	
13	Elia Georgiana	Dragomir	elia.dragomir@yahoo.com	Ploiesti	+ 40 244 575 059 (Informatics Department)	Romania	phd	Informatics Department	Petroleum-Gas University of Ploiesti	150	0	0	2010-07-05	2010-07-09	no	0
14	Ioana	Stanescu	ioana.stanescu@ats.com.ro	Targoviste	+40722322780	Romania	phd	Research Institute for Artificial Intelligence	Romanian Academy	150	0	1	2010-07-05	2010-07-09	no	0
15	Antoni	Stefan	antoni.stefan@ats.com.ro	Targoviste	+40722131092	Romania	msc	Faculty of Electrical Engineering	Valahia University of Targoviste	150	0	1	2010-07-05	2010-07-09	no	0
16	Andrei	Olaru	cs@andreiolaru.ro	Bucharest	+40723049598	Romania	phd	Computer Science	University Politehnica of Bucharest	1	1	2010-07-04	2010-07-11	no	1	
17	Shupantha	Kazi Imam	shupantha@yahoo.com	Warsaw	+48500052249	Poland	msc	Faculty of Mathematics and Information Science	Warsaw University of Technology	2	1	2010-07-05	2010-07-11	single	1	
18	Tudor	Berariu	tudor.berariu@gmail.com	Bucharest	+40723521952	Romania	msc	Faculty of Automatic Control and Computers, Department of Computer Science	University Politehnica of Bucharest	1	0	2010-07-04	2010-07-10	no	0	
19	Alexandru	Sorici	alex.sorici@gmail.com	Sibiu	0726379386	Romania	msc	Faculty of Automatic Control and Computers, Department of Computer Science	Polithnica Bucharest	1	0	2010-07-05	2010-07-10	no	0	
20	Andrei-Adnan	Ismail	iandrei@gmail.com	Bucuresti	+40743155166	Romania	msc	AI-MAS	Politehnica University of Bucharest	1	0	2010-07-04	2010-07-09	no	0	
21	Mihnea	Scafes	scafes_mihnea@software.ucv.ro	Craiova	0766692307	Romania	phd	Software Engineering	University of	2	1	2010-	2010-07-	single	0	

												07-05	10			
34	Radu-Casian	Mihailescu	raducasian.mihailescu@gmail.com	Madrid	+40722616242	Spain	phd	Computer Science Dept.	Rey Juan Carlos University	150	0	0	2010-07-04	2010-07-11	no	0
35	Serban	Radu	serbanradu@hotmail.com	Bucharest	+40721773581	Romania	phd	Computer Science	University Politehnica of Bucharest		1	0	2010-07-04	2010-07-11	no	1
36	Irina	Mocanu	irina.mocanu@gmail.com	Bucharest	+40722450613	Romania	researcher	Computer Science	University Politehnica of Bucharest		1	0	2010-07-04	2010-07-11	no	1

9. School statistics

Total number of registered participants (except the speakers and special participants) = **36**

Total number of participants (attendees) = 35

TOTAL number = 35 + 2 guests + 9 invited speakers = 46

Type of Grants

1 – participation (registration fees)

2 – participation + accomodation

3 – participation + accomodation + travel

Number of grants

19 grants of type 1 – participation(registration fees)

8 grants of type 2 – participation + accomodation

3 grants of type 3 – participation + accomodation + travel

Number of payed fees

5 payed registration fees

Position of participants

14 M.Sc. students

19 PhD students

2 Researchers

Participants by countries

Romania 26

Poland 2

Ukraine 1

Serbia 1

Bulgaria 3

Bosnia and Herzegovina 1

Spain 1

By the end of the school, participants were asked to fill in a questionnaire to get the feed-back of their experience.

10. Financial aspects

The total cost of the School and percentage of funding is presented in the table below.

Total cost of the School	
EUR	Percentage
14,567	
IFAAMAS	53.45%
COST AT	35.70%
Own	5.44%
Reg fees	5.49%

Amount

IFAAMAS	COST AT	Own	Registration fees
10,000.00 USD	5,200.00 Eur	792.41 Eur	800 Eur

The main budget positions that were covered were:

- Printing and publishing
 - Slides book, roll up, leaflet, folder, notes, badges, pens
 - Poster/announcement, roll up
 - Design of all printing and of School web site layout
- Catering & social
 - Lunch for 5 days for all participants
 - Coffee beaks 5 days x 2
 - Get to know party
 - Farewell party (Cocktail)
 - Speakers party
 - Trip to the mountains
 - Gas, parking
- Accommodation
 - Students - 11 persons
 - Speakers – 9 persons
- Plane tickets of speakers
- Student travel grants – 3 persons

The attached Excel file gives details on all incurred costs.

There were no costs associated to secretarial work and web site implementation as these were insured on a voluntary basis by the Organizing Committee.

There were no costs associated to communication and location rental as this was insured by the Faculty of Automatic Control and Computers, UPB.

11. Conclusions

We consider the SEE-MAS 2010, the first edition of the South Eastern European Multi-Agent Systems Summer School, to be a definite success. Our conclusion is based on the answers in the feed-back questionnaires filled in by the participants, on informal discussions with the participants, and on feed-back obtained from the invited speakers.

The main aim of the school was to promote knowledge and stimulate research in the field of intelligent agents and multi-agent systems in the South-Eastern European region but also in the Balkan countries. Students from other countries in the region were also welcome. We consider that the school achieved its aim.

We are definitely grateful to our sponsors, IFAAMAS and COST Action AT for the financial support that made possible the organization of this school.

We plan to make the School an permanent event and establish a tradition of a very strong School on Multi-Agent Systems in the South Eastern European region. For the 2011 edition of the school (SEE-MAS 2011) we have already applied for financial support to the Artificial Intelligence Journal (AIJ) following a call for proposals that was issued by the autumn of this year.

For SEE-MAS10 Organizing Committee

Prof. Adina Magda Florea

