



Declaratie

Subsemnatul Craciun Mihai Florin Gabriel, conferentiar in Departamentul de Informatica, Facultatea de Matematica si Informatica, Universitatea Babes-Bolyai, doresc sa candidez pentru functia de decan al Facultatii de Matematica si Informatica.

19 Martie 2020

Conf.dr.ing. Florin Craciun

A dark grey rectangular box containing a handwritten signature in black ink that reads "Florin Craciun".

Universitatea Babes-Bolyai

**PLAN MANAGERIAL
pentru functia de
Decan al Facultatii de Matematica si Informatica
mandatul 2020-2024**

propus de Conf. Dr. Ing. Florin Craciun

Florin Craciun

Floren Ciocan

Acest plan managerial reprezinta viziunea mea despre dezvoltarea Facultatii de Matematica si Informatica in perioada 2020-2024 si se bazeaza pe experienta mea in universitati de top 10 din Asia (Singapore, Japonia), SUA si Europa (Anglia, Olanda). Principalele obiective pe care mi le propun sunt urmatoarele:

1. **cresterea vizibilitatii nationale si internationale a domeniului Informatica astfel incat in urmatorii 4 ani departamentul de Informatica (romana, engleza, maghiara si germana) sa ajunga in primele 3 departamente de Informatica (computer science) din Romania iar in urmatorii 8 ani sa fie clasificat in topurile internationale**
2. **consolidarea pozitiei internationale de top a domeniului Matematica**
3. **dezvoltarea colaborarilor internationale atat in cercetare cat si in activitatile didactice**
4. **asigurarea transparentei procesului decizional**
5. **promovarea meritocratiei la toate nivelele**
6. **identificarea de noi surse extrabugetare de finantare**
7. **redefinirea colaborarii cu firmele de IT pe baza unor principii de castig reciproc**
8. **modularizarea activitatilor administrative**
9. **implicarea activa a facultatii in procesul general de informatizare al universitatii**
10. **dezvoltarea de programe didactice interdisciplinare si elaborarea de granturi impreuna cu alte facultati din universitate**

In continuare, voi prezenta actiunile concrete pe care le am in vedere pentru indeplinirea acestor obiective.

Activitatea de Cercetare

Cercetarea este principalul criteriu de evaluare al unei facultati/universitati. O problema majora a cercetarii in tara noastra este reducerea finantarii sau chiar lipsa ei, pentru anumite domenii mai teoretice. O alta problema (specifica Informaticii) este legata de volumul mare de timp alocat activitatilor didactice. Imi propun ca, in cadrul facultatii noastre, cercetarea in Informatica sa devina la fel de vizibila international ca si cercetarea in Matematica. Deasemenea, imi propun sa sprijin colegii de la Matematica sa se mentina cel putin la acelasi nivel la care au ajuns in acest moment. In acest sens imi propun urmatoarele obiective:

1. **Sprijinirea identificarii si promovarii directiilor de excelenta pentru ambele domenii Matematica si Informatica.** Atat Matematica cat si Informatica au cteva directii de excelenta demonstre de rezultatele exceptionale obtinute pana in acest moment. Imi propun sa sustin identificarea acestor directii exceptionale iar apoi sa le sustin cu prioritate ca si puncte tari de expertiza ale facultatii noastre in colaborarile nationale si internationale.
2. **Incurajarea publicatiilor de calitate (conferinte A si A*, jurnale in zona rosie si galbena).** Aceste publicatii sunt principalul mijloc prin care putem urca in ierarhia internationale. De aceea, voi sustine urmatoarele:
 1. **Decontarea integrala a taxei de participare la conferintele A* si A**
 2. **Decontarea parciala a taxei de participare la conferintele B.**

Floren Ciocium

3. **Premierea celor ce publica in jurnale din zona rosie sau galbena.**
4. **Organizarea unui seminar la nivel de facultate:** unde cei care au primit finantare isi prezinta rezultatele exceptionale. Acest seminar este o buna modalitate de a promova colaborarile dintre colegi.
3. **Identificarea unui cadru legal care sa permita reducerea normei didactice pentru rezultate de cercetare exceptionale (publicatii, granturi).**
4. **Incurajarea aplicatiilor pentru granturi nationale/internationale de cercetare.** De aceea, voi sustine urmatoarele:
 1. Organizarea la nivel de facultate de **seminarii cu specialisti** in elaborarea de aplicatii pentru granturi internationale
 2. Organizarea la nivel de facultate de **seminarii speciale** pentru identificarea si elaborarea unor granturi comune Matematica-Informatica
5. **Stimularea activitatii grupurilor de cercetare.** Seminariile in cadrul grupurilor de cercetare sunt foarte importante pentru identificarea unor posibile colaborari inter si intra grupuri. De aceea, voi sustine urmatoarele:
 1. Obligativitatea ca fiecare grup de cercetare sa organizeze cel putin **3 prelegeri publice per semestru**. Prelegerile pot fi facute de membrii ai grupului, colegi din universitate sau alte universitati, sau de specialisti din industrie.
 2. **Premierea** grupurilor care au obtinut rezultate exceptionale.
6. **Sprijinirea activitatii revistelor din cadrul facultatii noastre.** Matematica are mai multe reviste prestigioase pe care imi propun sa le sustin. Pentru Informatica, imi propun identificarea unor mecanisme care sa creasca prestigiul revistei existente dar si crearea unei noi reviste tehnice care sa se adreseze mai mult industriei IT.
7. **Sprijinirea activa a organizarii de conferinte nationale si internationale, workshop-uri (scoli de vara) in facultatea noastra.** Aceasta este un mijloc important de a creste vizibilitatea internationala a facultatii noastre. In acest sens, am in vedere urmatoarele:
 1. **Alocarea anuala din bugetul facultatii a unor fonduri speciale pentru crearea unei conferinte nationale de matematica si informatica.**
 2. **Atragerea de fonduri din industrie** pentru sustinerea organizarii unor conferinte internationale importante in facultatea noastra.
 3. **Atragerea de fonduri nationale** pentru organizarea de intalniri internationale in facultatea noastra.

Activitatea Didactica

Imi propun sa sprijin imbunatatirea calitatii actului didactic si imbunatatirea colaborarilor intre Informatica si Matematica, astfel incat sa asiguram o pregatire corespunzatoare a absolventilor nostri. In acest sens, am urmatoarele obiective:

1. **Imbunatatirea syllabus-urilor disciplinelor pentru fiecare program de studiu.** Consider foarte important (mai ales in Informatica) o actualizare anuala a continutului materialelor de predare. In acest sens, voi sustine urmatoarele:
 1. **Stabilirea unor responsabili pentru principalele subdomenii informatice si matematice, la nivel de facultate.** Acestia impreuna cu responsabilii disciplinelor din acel subdomeniu vor imbunatati syllabus-urile disciplinelor. Responsabilii se aleg pe baza criteriilor de excelenta din acel subdomeniu. Aceasta este o practica curenta in universitatile de top din lume.



2. **Stimularea organizarii pe module a disciplinelor (unde este posibil).** Aceasta ne va permite ca o disciplina sa poata fi predata de mai multi colegi, fiecare dintre ei avand competente in diferitele module. Aceasta este o practica curenta in universitatile de top din lume.
3. **Stimularea corelarii syllabus-ului fiecarei discipline cu syllabus-urile unor discipline asemanatoare predate in universitati din top 100.**
4. **Incurajarea unei prelegeri invitata in cadrul fiecarei discipline.** Prelegerea poate fi sustinuta de invitati competenti din industrie sau de colegi din department (sau de la alte universitati).
2. **Perfectionarea continua a responsabililor de discipline.** Acest lucru este foarte important pentru disciplinele noi introduse (in special cele tehnice unde avem putin know-how). In acest sens voi sustine urmatoarele:
 1. **Stimularea interactiunilor cu grupuri din industrie cu experienta in respectivul domeniu.**
 2. **Facilitarea si sustinerea financiara a deplasarilor in scop didactic la alte universitati din tara si din strainatate.** Aici am in vedere folosirea programului Erasmus dar si a relatiilor personale cu diferite universitati si grupuri din strainatate.
 3. **Facilitarea si sustinerea financiara a invitarii unor experti in domeniu pentru a organiza si preda cursuri pe o perioada scurta.** Aceasta este o practica internationala des utilizata in universitatile de top, atunci cand se introduc cursuri noi.

Relatii Internationale

Imi propun sa imi folosesc toate conexiunile internationale si experienta mea in universitatile de top in care am lucrat pentru a stabili legaturi institutionale de colaborare cu 4-5 universitati de top din Asia si SUA, care sa ne permita sa ne imbunatatim curricula si sa devinem lideri regionali pe cateva programe de studiu; sa stimuleze relatii de colaborare personale pe directiile noastre de cercetare prioritare (care implicit vor conduce la publicatii de top); sa ne ajute sa fim parteneri in granturi internationale importante; sa avem schimburi de cadre didactice si de studenti. Ca un exemplu a ceea ce voi face este actualul acord intre UBB si National University of Singapore (semnat inca din 2006 cind in calitate de membru al universitatii din Singapore am venit la UBB cu un grup de profesori sa stabilim o colaborare intre mai multe domenii printre care si Informatica), prin care studentii nostri isi pot face diploma sau lucrarea de disertatie in Singapore si prin care cadre didactice din UBB pot fi invitate pe pozitii de cercetare pe o perioada limitata in Singapore. Din pacate, acest acord nu a fost deloc promovat de facultatea noastra si in consecinta nu a fost folosit.

Un alt doilea obiectiv este atragerea de studenti la diploma dar si la doctorat din Asia (mai precis din China si Vietnam). Acesti studenti pot constitui o sursa extrabugetara de finantare foarte importanta. Facultatea noastra poate deveni foarte atragatoare pentru studentii non-EU.

Florențiu Crăciun

Relatii Nationale

Pe plan national imi propun sa consolidez la nivel instituțional relațiile bune pe care le am cu Universitatea A.I Cuza din Iasi, Universitatea Bucuresti, Universitatea Politehnica Bucuresti, dar și cu alte universități. In acest sens voi sustine urmatoarele:

- 1. Organizarea de seminarii de cercetare comune**
- 2. Aplicatii comune pentru granturi nationale si internationale**
- 3. Cresterea numarului de doctoranzi in co-tutela**
- 4. Preluarea experientei didactice in anumite domenii unde suntem deficitari**

Relatia cu Studentii

Imi propun urmatoarele obiective:

- 1. Stabilirea unui singur fel de examen pentru admiterea studentilor la profilul Informatica**
- 2. Mentinerea unei emulatii continue in mijlocul studentilor.** Aceasta imi propun sa o realizez prin urmatoarele doua actiuni concrete:
 - 1. Stimularea activitatii de cercetare a studentilor:** organizarea unei competitii interne in fiecare semestru, separat pentru studentii la diploma si studentii la master. Voi aloca fonduri pentru premierea celor mai bune rezultate.
 - 2. Stimularea implicarii studentilor in dezvoltarea sistemului informatic al facultatii/universitatii.** Voi aloca fonduri pentru implementarea unor parti ale sistemului informatic. Echipele de studenti (si cadrele didactice coordonatoare) care propun si implementeaza cel mai bun proiect vor fi premiate.

Administratie si Infrastructura

Pe acest plan imi propun urmatoarele obiective:

- 1. Sustinerea universitatii cu fonduri extrabugetare atrase din industria IT pentru construirea si amenajarea noului sediu al Informaticii.**
- 2. Informatizarea activitatilor administrative.** Voi aloca fonduri pentru stimularea implicarii cadrelor didactice si ale studentilor in proiectarea si implementarea sistemului informatic al facultatii noastre.
- 3. Modularizarea activitatilor administrative.** Impreuna cu colegii din administratie vom concepe un model de organizare modular si un set de proceduri independente care pe de o parte sa eficientizeze munca administrativa iar pe de alta parte sa ofere metodologii clare si simple pentru diferitele cereri ale cadrelor didactice si ale studentilor. Aici voi folosi conexiunile mele cu universitatea din Singapore, pentru a ne inspira din modelul lor administrativ (model foarte apreciat in lume).
- 4. Asigurarea transparentei procesului decizional.** In acest sens, am in vedere urmatoarele actiuni concrete:
 1. Voi sustine publicarea pe pagina de web a facultatii (cu acces restrictionat la membrii

- facultatii) a rezumatului sedintelor de consiliu la nivel de departament si facultate.
2. Pentru orice proces de selectie/concurs (concurs, cursuri optionale, burse, gradatii de merit, etc) voi sustine publicarea integrala a rezultatelor complete pentru toti candidatii (cu acces restrictionat la membrii facultatii)
 3. Voi sustine crearea unei infrastructuri de tip forum pentru consultarea publica a membrilor facultatii cu privire la deciziile importante. In acest forum fiecare membru al facultatii isi va putea exprima si argumenta parerile. Aceasta este o practica curenta in universitatile de top.

Relatia cu alte Facultati si Departamente din UBB

Pe acest plan imi propun urmatoarele obiective:

1. **Dezvoltarea de programe didactice interdisciplinare cu alte facultati din universitate**
2. **Elaborarea de granturi de cercetare impreuna cu alte facultati din universitate**
3. **Implicarea activa a facultatii in procesul general de informatizare al universitatii**

Relatia cu Industria IT

In ceea ce priveste relatia cu industria IT clujeana imi propun redefinirea cadrului de colaborare pe baza unor principii de castig reciproc. Marea problema a Informaticii este ca studentii fiind angajati foarte devreme de firmele IT (inca din perioada practicii) isi pierd interesul pentru studiu. Totusi firmele IT au nevoie de oameni foarte bine pregatiti. Pe de alta parte, in unele subdomenii, firmele au mai multa expertiza decat facultatea noastră.

Cluj-Napoca, 19.03.2020

Conf.dr.ing. Florin Craciun

A rectangular box containing a handwritten signature in black ink, which appears to read "Florin Craciun".



Florin Craciun

Europass Curriculum Vitae	
Personal information	
First name(s) / Surname(s)	Florin Craciun
Address(es)	4, Ariesului, 400441, Cluj-Napoca, Romania
Telephone(s)	Mobile: +40735162477
Fax(es)	
E-mail	craciunf@gmail.com and craciunf@cs.ubbcluj.ro
Nationality	Romanian
Date of birth	3 rd of August, 1973
Gender	Male
Work experience	
Dates	04/2014 - present
Occupation or position held	Associate Professor
Main activities and responsibilities	Teaching and Research
Name and address of employer	Computer Science Departament, Faculty of Mathematics and Informatics, Babes-Bolyai University, M. Kogalniceanu street nr 1, Cluj-Napoca
Type of business or sector	Research, university
Dates	10/2012 -04/2014
Occupation or position held	Lecturer
Main activities and responsibilities	Teaching and Research
Name and address of employer	Computer Science Departament, Faculty of Mathematics and Informatics, Babes-Bolyai University, M. Kogalniceanu street nr 1, Cluj-Napoca
Type of business or sector	Research, university
Dates	09/2011 -02/2013
Occupation or position held	Research Fellow, POSDRU 89/1.5/S/60189
Main activities and responsibilities	Research, software prototype design and implementation, scientific paper writing, supervision of master and PhD students
Name and address of employer	Computer Science Departament, Faculty of Mathematics and Informatics, Babes-Bolyai University, M. Kogalniceanu street nr 1, Cluj-Napoca
Type of business or sector	Research, university

Dates	02/2010 -02/2012
Occupation or position held	External Part-time Lecturer
Main activities and responsibilities	Teaching
Name and address of employer	Computer Science Department, Faculty of Mathematics and Informatics, Babes-Bolyai University, M. Kogalniceanu street nr 1, Cluj-Napoca
Type of business or sector	Research, university
Dates	02/2010 -08/2010
Occupation or position held	Research Fellow
Main activities and responsibilities	Research, software prototype design and implementation, scientific paper writing, supervision of master and PhD students
Name and address of employer	School of Computing, National University of Singapore, 13 Computing Drive, Singapore 117417
Type of business or sector	Research, university
Dates	04/2008 – 04/2009
Occupation or position held	Research Associate
Main activities and responsibilities	Research, software prototype design and implementation, scientific paper writing, research proposal writing, supervision of PhD students
Name and address of employer	Department of Computer Science, Durham University, South Road Durham, DH1 3LE, United Kingdom
Type of business or sector	Research, university
Dates	02/2006 – 04/2008
Occupation or position held	Research Assistant
Main activities and responsibilities	Research, software prototype design and implementation, scientific paper writing, undergraduate students supervision
Name and address of employer	School of Computing, National University of Singapore, 13 Computing Drive, Singapore 117417
Type of business or sector	Research, university
Dates	02/2001 – 12/2001
Occupation or position held	Assistant Lecturer
Main activities and responsibilities	Research, software prototype design and implementation, scientific paper writing, research proposal writing, held tutorial classes and lab sessions
Name and address of employer	Department of Computer Science, Faculty of Automatics and Computer Science, Technical University of Cluj-Napoca, 28, Gh. Baritiu St., 400027, Cluj-Napoca Romania

Florin Coaciu

Type of business or sector	
	Research, university
Dates	02/1999 - 02/2001
Occupation or position held	Junior Lecturer
Main activities and responsibilities	Research, software prototype design and implementation, scientific paper writing, research proposal writing, held tutorial classes and lab sessions
Name and address of employer	Department of Computer Science, Faculty of Automatics and Computer Science, Technical University of Cluj-Napoca, 28, Gh. Baritiu St., 400027, Cluj-Napoca Romania
Type of business or sector	Research, university
Dates	10/1996- 02/1999
Occupation or position held	Software Engineer
Main activities and responsibilities	software design and implementation, software management, infrastructure management
Name and address of employer	Computer Science Department , Cluj Division, Romanian Railways Company
Type of business or sector	Industrial Informatics
Education and training	
Dates	03/2002 – 03/2008
Title of qualification awarded	PhD in Computer Science
Principal subjects/occupational skills covered	programming languages, compilers, formal methods, software/system engineering, embedded systems with emphasis on static program analysis, type systems, automated software verification, secure and dependable software, functional programming, object-oriented programming, programming language design and formal specification and modeling
Name and type of organization providing education and training	School of Computing National University of Singapore
Level in national or international classification	Level 6 - Second stage of tertiary education
Dates	10/1997- 06/1998
Title of qualification awarded	M.Sc. in Computer Science
Principal subjects/occupational skills covered	Distributed System, Web Programming, Database

Name and type of organization providing education and training	Department of Computer Science, Faculty of Automatics and Computer Science, Technical University of Cluj-Napoca							
Level in national or international classification	Level 6 - Second stage of tertiary education							
Dates	10/1991 – 06/1996							
Signature	<i>Florin Crăciun</i>							
Title of qualification awarded	Engineer in Computer Science							
Principal subjects/occupational skills covered	Computer science curriculum							
Name and type of organization providing education and training	Department of Computer Science, Faculty of Automatics and Computer Science, Technical University of Cluj-Napoca							
Level in national or international classification	Level 5 - First stage of tertiary education							
Dates	1987- 1991							
Title of qualification awarded	High school diploma							
Principal subjects/occupational skills covered	Mathematics and Physics specialization							
Name and type of organization providing education and training	"Emil Racovita" High School, Cluj-Napoca							
Level in national or international classification	Level 3 - (Upper) secondary education							
Personal skills and competences								
Mother tongue(s)	Romanian							
Other language(s)								
Self-assessment	Understanding			Speaking			Writing	
European level (*)	Listening		Reading		Spoken interaction		Spoken production	
English	C1	Proficient speaker	C1	Proficient speaker	C1	Proficient speaker	C1	Proficient speaker

Social skills and competences	<ul style="list-style-type: none"> • Capacity to adapt to multicultural environments, obtained through my academic positions and visits (NUS Singapore, MIT US, Durham University UK, Tokyo University Japan, Berkeley University US, Stanford University US, Cambridge University UK) • Teamwork skills obtained from research projects activities • Good communication skills
Organizational skills and competences	<p>Project manager: - I have coordinated many software projects while I was working in industry - I have also coordinated many software projects (regarding software prototypes to validate the theoretical results) during my PhD and Postdoctoral stages</p> <p>Research Project Coordinator: I have got an ANSTI grant for young researchers at Technical University of Cluj-Napoca, a Microsoft research grant at National University of Singapore and one individual POSDRU grant at Babes-Bolyai University.</p> <p>Informal supervisor for: one PhD student in cooperation program Siemens-Babes-Bolyai University, one PhD student at A. I. Cuza University, two PhD students at Durham University, one master student and several undergraduate students (including internship students) at National University of Singapore.</p> <p>Conference Organization: I was helping to organise three international conferences: Asian Symposium on Programming Languages and Systems 2004, 3rd IEEE/IFIP International Symposium on Theoretical Aspects of Software Engineering 2009, 8th International Symposium on Automated Technology for Verification and Analysis 2010, ICFEM 2019, TASE 2019, ICFEM 2020, TASE 2020, FROm 2020.</p>
Additional Informations	<ul style="list-style-type: none"> • Google Scholar Citations: 222 • Google Scholar h-index: 7 • I meet all the criteria for habilitation and UBB professor position.

Floren Craciun

Annexes	<ol style="list-style-type: none"> 1. Research Interests 2. List of scientific papers 3. Talks/Presentations 4. Research Grants, Awards and Scholarships 5. Other Professional Activities 6. Research Visits 7. Research Experience 8. Member PhD Thesis Committees 9. Teaching Experience 10. References
---------	---

Annex 1. Research Interests

My main research interests lie in programming languages, formal methods, software/system engineering, static program analysis, type systems, automated software verification, separation logic, secure and dependable software, functional programming, programming language design and formal specification and modeling. I have been intensively involved in the research on the following topics:

- **Type based approaches to program analysis and verification:** During my PhD I have studied advanced type systems (combining type annotations with flow analysis) for object-oriented languages. I have obtained results in the following areas: (i) safe region-based memory management published at PLDI2004, ICFEM2008, APLAS2008; (ii) software reusability via better generic types published at OOPSLA2006, ESOP2009; and (iii) design of a minimal expression-oriented language for object-oriented languages published at OOPSLA Companion2006, ICCP2006.
- **Automated verification via separation logic:** During my postdoc stages and research visits in Prof . Wei-Ngan Chin' s group at NUS and Prof. Shengchao Qin's group at Durham University and Teesside University I have worked on program verification using separation logic. I have obtained results in the following areas: (i) verification of the programs with unknown function calls published at WING2009, VSST2009, ICFEM2010, journal of Symbolic Computation2010; (ii) discovery of specifications in a combined domains published at ICFEM2013; (iii) complete specifications with an error calculus published at NASAFM2013; (iv) improve the reasoning with disjunctive predicates published at CAV2011.
- **Automated verification of the communication protocols:** Recently I have studied several mechanisms to verify communication protocols. The results have been published at ICECCS2015, ICCP2015, MIPRO2015.

Floren Caicium

Annex 2. List of scientific papers

1. **Florin Craciun**, Wei-Ngan Chin, and Shengchao Qin. Variant Region Types. In *Proceedings of the 23rd International Conference on Engineering of Complex Computer Systems (ICECCS '18)*. IEEE Computer Society. Melbourne, Australia. 12-14 December 2018. (A category)
2. Andreea Costea, Wei-Ngan Chin, Shengchao Qin, and **Florin Craciun**. Automated Modular Verification for Relaxed Communication Protocols. In *Asian Symposium of Programming Languages and Systems (APLAS'18)*. Wellington, New Zealand, 2-6 December 2018. (B category)
3. Zhiwu Xu, Kerong Ren, Shengchao Qin and **Florin Craciun**. CDGDroid: Android Malware Detection Based on Deep Learning using CFG and DFG. In *20th International Conference on Formal Engineering Methods (ICFEM'18)*. Gold Coast, Australia. 12-16 November 2018. (B category)
4. **Florin Craciun** and Gabriel Glodean. Towards Compiling Region Types into RTSJ-compliant Java Code. In *Symbolic and Numeric Algorithms for Scientific Computing (SYNASC' 18)*. Timisoara, Romania. 20-23 September 2018. (C category)
5. Shengchao Qin, Guanhua He, Wei-Ngan Chin, **Florin Craciun**, Mengda He, and Zhong Ming. Automated specification inference in a combined domain via user-defined predicates. *Science of Computer Programming*, 2017, ISSN 0167-6423, <http://dx.doi.org/10.1016/j.scico.2017.05.007> (C category)
6. **Florin Craciun**, Tibor Kiss, and Andreea Costea. Towards a Session Logic for Communication Protocols. In *Proceedings of the 2015 20th International Conference on Engineering of Complex Computer Systems (ICECCS) (ICECCS '15)*. IEEE Computer Society, Washington, DC, USA, 140-149. <http://dx.doi.org/10.1109/ICECCS.2015.33> (A category)
7. Tibor Kiss, **Florin Craciun** and Bazil Parv. Verification of protocol specifications with Separation Logic. *IEEE International Conference on Intelligent Computer Communication and Processing (ICCP)*, Cluj-Napoca, 2015, pp. 109-116. doi: 10.1109/ICCP.2015.7312614 (C category)
8. Tibor Kiss, **Florin Craciun**, and Bazil Parv. Extending Laris with Session Types: A Case Study in Railway Interlocking, *38th International Convention on Information and Communication Technology, Electronics and Microelectronics, Telecommunications and Information, Miprotec 2015*, Opatija, Croatia, 729-735, May, 2015. (D category)
9. Guanhua He, Shengchao Qin, Wei-Ngan Chin and **Florin Craciun**. Automated Specification Discovery via User-Defined Predicates, In *Formal Methods and Software Engineering: 15th International Conference on Formal Engineering Methods, ICFEM 2013*, Queenstown, New Zealand, October 29 -- November 1, 2013, Proceedings, Springer Berlin, 397—414, isbn="978-3-642-41202-8", https://doi.org/10.1007/978-3-642-41202-8_26 (B category)
10. Quang Loc Le, Asankhaya Sharma, **Florin Craciun**, Wei-Ngan Chin, Towards Complete Specifications with an Error Calculus. In *Proceedings of NASA Formal Methods: 5th International Symposium, NFM 2013*, Moffett Field, CA, USA, May 14-16, 2013, Springer Berlin Heidelberg, LNCS, volume 7871, 291—306, isbn=978-3-642-38088-4, https://doi.org/10.1007/978-3-642-38088-4_20. (C category)
11. **Florin Craciun**, Simona Motogna, and Bazil Parv, Towards a Region-based Calculus for Energy-Aware Programming, *Studia Universitatis Babes-Bolyai Series Informatica*, 93-101, 2013. (D category)

Florin Craciun

12. Simona Motogna, **Florin Craciun**, and Gabriel Glodean, fUML Formal Description, *9th International Conference on Applied Mathematics*, 2013. (D category)
13. Simona Motogna, **Florin Craciun**, Ioan Lazar, and Bazil Parv, Formal Definition of fUML in K-Framework, *Knowledge Engineering: Principles and Techniques Conference (KEPT 2013)* 41-53, 2013. (D category)
14. **Florin Craciun**, Advanced Type System for Region-based Memory Management, *Zilele Academice Clujene* (ZAC 2012), 54-60, May, 2012. (D category)
15. Wei-Ngan Chin, Cristian Gherghina, Răzvan Voicu, Quang Loc Le, **Florin Craciun**, and Shengchao Qin. 2011. A specialization calculus for pruning disjunctive predicates to support verification. In *Proceedings of the 23rd international conference on Computer aided verification (CAV'11)*, Springer-Verlag, 293-309. (A* category)
16. Miltion Frentiu and **Florin Craciun**, Why must we teach verification and validation to undergraduates?, *Knowledge Engineering: Principles and Techniques Conference (KEPT 2011)* ,295-304, 2011 (D category)
17. Shengchao Qin, Chenguang Luo, Guanhua He, **Florin Craciun**, and Wei-Ngan Chin. 2010. Verifying heap-manipulating programs with unknown procedure calls. In *Proceedings of the 12th International conference on Formal engineering methods and software engineering (ICFEM'10)*, Springer-Verlag, Berlin, Heidelberg, 171-187. (B category)
18. Chenguang Luo, **Florin Craciun**, Shengchao Qin, Guanhua He, Wei-Ngan Chin. 2010. Verifying pointer safety for programs with unknown calls, *Journal of Symbolic Computation*, Volume 45, Issue 11, 2010, Pages 1163-1183, ISSN 0747-7171, <http://dx.doi.org/10.1016/j.jsc.2010.06.003>.(A category)
19. **Florin Craciun**, Wei-Ngan Chin, Guanhua He, and Shengchao Qin. 2009. An Interval-Based Inference of Variant Parametric Types. In *Proceedings of the 18th European Symposium on Programming Languages and Systems: Held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS 2009 (ESOP '09)*, Springer-Verlag, 112-127. http://dx.doi.org/10.1007/978-3-642-00590-9_9. (A category)
20. **Florin Craciun**, Chenguang Luo, Guanhua He, Shengchao Qin and Wei-Ngan Chin, Discovering Specifications for Unknown Procedures - Work in Progress.2009, *Second International Workshop on Invariant Generation Held as Workshop of the Joint European Conferences on Theory and Practice of Software, ETAPS 2009 (ESOP, CC, FOSSACS), (WING 2009)*, EPiC Series in Computing, volume 1, 76—91, 2010. <http://mtc.epfl.ch/events/WING09/Program.php> (B category)
21. Chenguang Luo, **Florin Craciun**, Shengchao Qin, Guanhua He, and Wei-Ngan Chin Discovering Specifications for Unknown Procedures with Separation Logic, *Workshop on Verified Software: Theory, Tools, and Experiments* (2009), September, 2009. (D category)
22. **Florin Craciun**, Shengchao Qin, and Wei-Ngan Chin. 2008. A Formal Soundness Proof of Region-Based Memory Management for Object-Oriented Paradigm. In *Proceedings of the 10th International Conference on Formal Methods and Software Engineering (ICFEM '08)*, Springer-Verlag, 126-146. http://dx.doi.org/10.1007/978-3-540-88194-0_10 (B category)
23. Alexandru Stefan, **Florin Craciun**, and Wei-Ngan Chin. 2008. A Flow-Sensitive Region Inference for CLI. In *Proceedings of the 6th Asian Symposium on Programming Languages and Systems (APLAS '08)*, Springer-Verlag, 19-35, http://dx.doi.org/10.1007/978-3-540-89330-1_3(B category)

Florin Craciun

24. Wei-Ngan Chin, **Florin Craciun**, Siau-Cheng Khoo, and Cornelius Popescu. 2006. A flow-based approach for variant parametric types. In *Proceedings of the 21st annual ACM SIGPLAN conference on Object-oriented programming systems, languages, and applications (OOPSLA '06)*. ACM, USA, 273-290, <http://dx.doi.org/10.1145/1167473.1167498> (A* category)
25. Wei-Ngan Chin, **Florin Craciun**, Siau-Cheng Khoo, and Cornelius Popescu. 2006. A flow-based approach for variant parametric types. In *ACM SIGPLAN Notices*, Volume 41 Issue 10, 273-290, October 2006. (C category)
26. **Florin Craciun**, Hong Yaw Goh, and Wei-Ngan Chin, A Framework for Object-Oriented Program Analyses via Core-Java, *IEEE 2nd International Conference on Intelligent Computer Communication and Processing (ICCP 2006)*, Cluj-Napoca, Romania, September, 2006. (C category)
27. Wei-Ngan Chin, **Florin Craciun**, Shengchao Qin, and Martin Rinard. 2004. Region inference for an object-oriented language. In *Proceedings of the ACM SIGPLAN 2004 conference on Programming language design and implementation (PLDI '04)*. ACM, USA, 243-254. <http://dx.doi.org/10.1145/996841.996871> (A* category)
28. Wei-Ngan Chin, **Florin Craciun**, Shengchao Qin, and Martin Rinard. 2004. Region inference for an object-oriented language. In *SIGPLAN Notices*, Volume 39, Issue 6, June 2004, 243-254. (C category)
29. Ioan Alfred Letia, **Florin Craciun**, and Zoltan Köpe. 2001. Norms for DLP Agents Working in a Warehouse Scenario. In *Proceedings of the 14th International conference on Industrial and engineering applications of artificial intelligence and expert systems: engineering of intelligent systems (IEA/AIE '01)*, Springer-Verlag, UK, 728-733. (B category)
30. Ioan Alfred Letia, **Florin Craciun**, and Zoltan Köpe. 2000. Towards Validation of Specifications by Simulation. In *Revised Papers from the International Workshop on Infrastructure for Multi-Agent Systems: Infrastructure for Agents, Multi-Agent Systems, and Scalable Multi-Agent Systems*, Springer-Verlag, LNCS, volume 1887, 293-295. (C category)
31. Ioan Alfred Letia, **Florin Craciun**, and Zoltan Köpe. 2000. Validating the Behavior of Self-Interested Agents in an Information Market Scenario. In *Proceedings of the Second International Conference on Intelligent Data Engineering and Automated Learning, Data Mining, Financial Engineering, and Intelligent Agents (IDEAL '00)*, Springer-Verlag, UK, 392-397. (C category)
32. Ioan Alfred Letia, **Florin Craciun**, Zoltan Köpe, and Alexandru Lelutiu. 2000. First Experiments for Mining Sequential Patterns on Distributed Sites with Multi-Agents. In *Proceedings of the Second International Conference on Intelligent Data Engineering and Automated Learning, Data Mining, Financial Engineering, and Intelligent Agents (IDEAL '00)*, Springer-Verlag, London, UK, 187-192. (C category)
33. Ioan Alfred Letia, **Florin Craciun**, Zoltan Köpe, and Aurel Netin, 2000. Distributed diagnosis by BDI agents, *IASTED International Conference Applied Informatics (AI)*, Innsbruck, Austria, February, 2000, ACTA Press, 862-867.(C category)
34. Ioan Alfred Letia, **Florin Craciun**, and Zoltan Köpe, Experiments with cooperating, self-interested BDI agents, *International Conference on Technical Informatics (CONTI 2000)*, Timisoara, Romania, October, 2000. (D category)
35. Ioan Alfred Letia, **Florin Craciun**, and Zoltan Köpe, Multi-agents for distributed diagnosis, *International Symposium on System Theory, Automation, Robotics, Computers, Informatics, Electronics, and Instrumentation (SINTES 2000)*, Craiova, Romania, May, 2000. (D category)

Florin Craciun

Posters:

36. **Florin Craciun**, Simona Motogna, and Ioan Lazar. 2013. Towards Better Testing of fUML Models. In *Proceedings of the 2013 IEEE Sixth International Conference on Software Testing, Verification and Validation (ICST '13)*. IEEE Computer Society, Washington, DC, USA, 485-486. <http://dx.doi.org/10.1109/ICST.2013.67>
37. Alexandru Stefan, **Florin Craciun**, and Wei-Ngan Chin, Region-based memory for CLI, *Asian Symposium on Programming Languages and Systems (APLAS 2007)*, Poster Session, Singapore, December, 2007.
38. **Florin Craciun**, Hong Yaw Goh, Cornelius Popescu, and Wei-Ngan Chin, Core-Java: An Expression-Oriented Java, *Companion to the ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA 2006)* , Portland, Oregon, October, 2006.
39. **Florin Craciun**, Cornelius Popescu, and Wei-Ngan Chin, Flow Analysis for Variant Parametric Types in Java, *Asian Symposium on Programming Languages and Systems (APLAS 2005)*, Poster Session, Japan, November, 2005.
40. **Florin Craciun** and Wei-Ngan Chin, Optimizations in region based programming, *Asian Symposium on Programming Languages and Systems (APLAS 2004)*, Poster Session, Taiwan, November, 2004.

Theses:

41. **Florin Craciun**, “Advanced Flow-based Type Systems for Object-Oriented Languages”, Ph. D. Thesis, School of Computing, National University of Singapore, October, 2008.
42. **Florin Craciun**, “Distributed Applications on Internet”, M.Sc. Thesis, Computer Science Department, Technical University of Cluj-Napoca, 1998.
43. **Florin Craciun**, “An Expert System based on an Uncertainty Network”, B. Sc. Thesis, Computer Science Department, Technical University of Cluj-Napoca, 1998.



Annex 3. Talks/Presentations

1. “**Region-based Memory Management for BigData Applications**”. Invited talk at the third edition of Working Formal Methods Symposium (FROM) , Timisoara, September, 2019.
2. “**Towards a Session Logic for Communication Protocols**”. Invited talk at the first edition of Working Formal Methods Symposium (FROM) , Bucharest, June, 2017.
3. “**An Interval-based Inference of Variant Parametric Types**”. At the European Symposium of Programming (ESOP09), UK, March, 2009.
4. “**A Formal Soundness Proof of Region-based Memory Management for Object-Oriented Paradigm**”. At the International Conference on Formal Methods and Software Engineering (ICFEM 2007), Kitakyushu, Japan, October, 2008.
5. “**A Flow-based Approach for Variant Parametric Types**”. At the ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA 2006), Portland, Oregon, October, 2006.
6. “**Core-Java: an expression-oriented Java**”. At the ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA 2006), Poster Session , Portland, Oregon, October 2006.
7. “**A Flow-based Approach for Variant Parametric Types**”. At School of Computing, National University of Singapore, October, 2006.
8. “**A Flow-based Approach for Variant Parametric Types**”. At the Programatica Group Seminar, Portland State University, Oregon, October, 2006.
9. “**A Flow-based Approach for Variant Parametric Types**”. At Galois Connections Inc., Oregon, October, 2006.
10. “**A Framework for Object-Oriented Program Analyses via Core-Java**”. At the IEEE 2nd International Conference on Intelligent Computer Communication and Processing (ICCP 2006), Cluj-Napoca, Romania, September, 2006.
11. “**Flow Analysis for Variant Parametric Types in Java**”. At the Asian Symposium on Programming Languages and Systems (APLAS 2005), Poster Session, Japan, November, 2005.
12. “**Region Inference for an Object-Oriented Language**”. At the 20th Tokyo Programming Seminar, Tokyo University, Japan, April, 2005.
13. “**Region Inference for an Object-Oriented Language**”. At Graduate School of Informatics, Kyoto University, Japan, May, 2005.
14. “**Optimizations in Region-based Programming**”. At the Asian Symposium on Programming Languages and Systems (APLAS 2004), Poster Session, Taiwan, November, 2004.
15. “**Region Inference for an Object-Oriented Language**”. At the National Information Technology Awareness (NITA), Postgraduate Category, School of Computing, National University of Singapore, March, 2004.
16. “**Norms for DLP agents working in a warehouse scenario**”. At the Industrial and Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE), Hungary, June, 2001.
17. “**Distributed diagnosis by BDI agents**”. At the IASTED International Conference Applied Informatics, Austria, February, 2000.

Floren Craciun

Annex 4. Research Grants, Awards and Scholarships

- 2019 ***UBB Advanced Fellowship***
- 2015 ***Accenture Grant*** obtained by competition, but not signed due to the unfair collaboration conditions
- 2011-2013 ***Research Grant inside the European POSDRU Programme 89/1.5/S/60189***, Babes-Bolyai University
- 2009—2011 ***ERCIM "Alain Bensoussan" Fellowship***, 9 months at CWI, Olanda and 9 months at FhG-IESE, Germany. I could not accept ERCIM fellowship since my parents' health situation required my presence in Romania during the entire year 2009.
- 2008 ***Onassis Foundation Financial Support***, to attend the 2008 Lectures in Computer Science devoted to "Embedded networked Systems: Theory and Applications", University of Crete and Foundation for Research and Technology-Hellas (FORTH).
- 2002—2006 ***Research Scholarship***, School of Computing, National University of Singapore.
- 2004—2005 ***President Graduate Fellowship***, School of Computing, National University of Singapore.
- 2004 ***Dean's Graduate Award***, School of Computing, National University of Singapore.
- 2004 ***"Most Rigorous Project"*** (Postgraduate Category), 8th National IT Awareness Project Competition, National University of Singapore.
- 2001 ***Research Scholarship (6 months internship)***, School of Computing, National University of Singapore.
- 2000—2001 ***Research Grant Coordinator: "Modelarea si Simularea Agentilor Inteligenti pentru Aplicatii Internet"***, code ANSTI 375, Romanian Ministry of Technology and Innovation, ANSTI (Romanian National Agency for Young Researchers).
- 1999 ***Tempus Scholarship S_JEP 11248-96*** at Free University of Amsterdam, Netherlands, June – September 1999.
- 1991—1996 ***Merit-based Scholarship***, Technical University of Cluj-Napoca, Romania.

Floren Craciun

Floren Craciun

Annex 5. Other Professional Activities

Program Committee Member:

- **FROM 2020**
- **ICFEM 2020**
- **Journal: Science of Computer Programming 2020**
- **TASE 2020**
- **ICFEM 2019:** The 21st International Conference on Formal Engineering Methods, Shenzhen, China November 2019
- **TASE 2019:** The 13th IEEE International Symposium on Theoretical Aspects of Software Engineering, Guilin, China, July 2019.
- **FROM 2018:** The second edition of Working Formal Methods Symposium
- **MIKE 2018:** 6th International Conference on Mining Intelligence and Knowledge Exploration
- **TASE 2012:** The Sixth IEEE International Symposium on Theoretical Aspects of Software Engineering, Beijing, China, 4-6 July 2012.
- **FTfJP 2012:** 14th ECOOP Workshop on Formal Techniques for Java-like Programs, Beijing, China, 12 June, 2012.
- **ICFEM 2011:** 13th International Conference on Formal Engineering Methods, UK, October, 2011
- **ATVA 2010:** 8th International Symposium on Automated Technology for Verification and Analysis, Singapore, September, 2010.
- Publicity Chair and Poster Chair for **TASE 2009:** 3rd IEEE/IFIP International Symposium on Theoretical Aspects of Software Engineering, Tianjin, China. 29-21 July, 2009
- Web master (paper submission system and web page) for **APLAS'04**, November, 2004, Taipei.

External Reviewer for:

- **TASE 2018**
- **Journal: Science of Computer Programming: 2009**
- **Studia Universitatis Babes-Bolyai Series Informatics** 2012, 2013, 2014, 2015, 2016
- **Asian Symposium on Programming Languages and Systems (APLAS)**: 2003, 2004, 2005, 2006, 2007, 2008, 2009.
- **ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI)**: 2005, 2008.
- **Static Analysis Symposium (SAS)**: 2006.
- **Generative Programming and Component Engineering (GPCE)**: 2007.
- **IEEE International Symposium on Theoretical Aspects of Software Engineering (TASE)**: 2007.
- **International Conference on Formal Engineering Methods (ICFEM)**: 2008, 2010.
- **Partial Evaluation and Program Manipulation (PEPM)**: 2008, 2009.
- **ACM SIGACT-SIGPLAN Symposium on Principles of Programming Languages**

(POPL): 2010.

- ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA): 2010.
- International Symposium on Formal Methods (FM): 2012.
- ACM SIGPLAN/SIGBED Conference on Languages, Compilers, Tools and Theory for Embedded Systems (LCTES): 2012.

Professional Memberships

- Association for Computing Machinery (ACM)
- Association for Computing Machinery , Special Interest Group on Programming Languages (ACM SIGPLAN)
- IEEE Computer Society

Floren Giacium

Annex 6. Research Visits

- National University of Singapore, 12/2018
- National University of Singapore, 08/2013
- Teesside University, UK, 09/2012-11/2012
- National University of Singapore, 02/2010-08/2010
- Portland University, USA, 10/2006
- Berkely University, USA, 10/2006
- Standford University, USA, 10/2006
- Tokyo University, Japan, 05/2005
- Kyoto University, Japan, 05/2005
- MIT, USA, 06/2004
- Harvard University, USA, 06/2004
- Vermont University, 06/2004
- Boston University, 06/2004
- Free University of Amsterdam, 06/1999-08/1999

Floren Craciun

Florin Craciun

Annex 7. Research Experience

Dates	09/2011 – 03/2013
Research project/ topic	Resource Analysis and Verification for Collaborative Systems Running on Smart Mobile Devices
Main activities and responsibilities	I have coordinated an individual research project. I was doing the following research activities: software prototype design and implementation, and scientific paper writing.
Name and address of the research project coordinator	Dr. Florin Craciun Computer Science Department, Faculty of Mathematics and Informatics, Babes-Bolyai University, M. Kogalniceanu street nr 1, Cluj-Napoca
Beneficiary of the research project	Babes-Bolyai University, European POSDRU Programme 89/1.5/S/60189
Research competences	I have studied the correctness and the efficiency of resource (memory and battery) usage for the Android programs. The results have been published at ICFEM 2013, ICST 2013, NFM 2013, KEPT 2013 and Studia Informatics 2013.
Dates	02/2010 – 06/2010
Research project/ topic	Specification and Verification for Future Programmers
Main activities and responsibilities	As Research Fellow I was doing the following research activities: software prototype design and implementation, scientific paper writing, supervision of master and PhD students
Name and address of the research project coordinator	Prof. Wei-Ngan CHIN Associate Professor in Computer Science School of Computing, National University of Singapore, 13 Computing Drive, Singapore 117417
Beneficiary of the research project	National University of Singapore and A*STAR Singapore

Research competences	I have studied two possible aspects to improve the automated verifier SLEEK (that was already built by Prof Chin's group): (i) a way to improve the explanation of the program errors founded during program verification; (ii) a way to improve the automated proof search by simplifying the obligations sent to the theorem provers. I have also improved my knowledge on separation logic, verification and theorem provers (especially SAT solvers). The results have been published at CAV 2011.
Dates	04/2008 – 04/2009
Research project/ topic	Resource Analysis and Verification for Dependable Embedded Software
Main activities and responsibilities	As Research Associate I was doing the following research activities: software prototype design and implementation, scientific paper writing, research proposal writing, supervision of PhD students
Name and address of the research project coordinator	Dr. Shengchao QIN Reader in Computer Science Department of Computer Science, University of Teesside, Middlesbrough TS1 3BA, U.K.
Beneficiary of the research project	Durham University and EPSRC U.K.
Research competences	I have worked on a novel shape analysis that combines separation logic with a symbolic size analysis in order to estimate and verify at compile time the memory usage bounds of C programs. A PhD student and I have designed and implemented a prototype. Another PhD student and I have designed and implemented a new method to verify the programs with unknown procedures calls. The results have been published at WING workshop at ETAPS 2009, VSST workshop at FM 2009, ICFEM 2010 and Symbolic Computation journal 2010.
Dates	2006 - 2008
Research project/ topic	A Constructive Approach to Dependable Software
Main activities and responsibilities	As Research Assistant (and also PhD student) I was doing the following research activities: software prototype design and implementation, scientific paper writing, supervision of undergraduate students (including internship students).

Floren Caicium

Name and address of the research project coordinator	Prof. Wei-Ngan CHIN Associate Professor in Computer Science School of Computing, National University of Singapore, 13 Computing Drive, Singapore 117417
Beneficiary of the research project	National University of Singapore and A*STAR Singapore
Research competences	I have acquired knowledge on automatic program verification and separation logic. I have also extended my PhD thesis results by designing and implementing the first algorithm that can automatically infer Java generic types (wildcards). The results have been published at ETAPS ESOP 2009.
Dates	2006 - 2008
Research project/ topic	A Scalable Region-Based Memory for SSCLI
Main activities and responsibilities	As Research Assistant (and also PhD student) I was doing the following research activities: software prototype design and implementation, scientific paper writing, supervision of undergraduate students (including internship students).
Name and address of the research project coordinator	Prof. Wei-Ngan CHIN Associate Professor in Computer Science School of Computing, National University of Singapore, 13 Computing Drive, Singapore 117417
Beneficiary of the research project	Microsoft Research Redmond
Research competences	This project has been applied to .NET platform the theoretical results regarding region-based memory management. An intern student and I have extended our region-based prototype to Microsoft SSCLI platform. The results have been published at APLAS 2008.
Dates	2003 - 2007
Research project/ topic	Verifying Software Safety with Constraint Type System
Main activities and responsibilities	As PhD student I was doing the following research activities: software prototype design and implementation, scientific paper writing, supervision of undergraduate students (including internship students).

Flamin Ciocium

Name and address of the research project coordinator	Prof. Wei-Ngan CHIN Associate Professor in Computer Science School of Computing, National University of Singapore, 13 Computing Drive, Singapore 117417
Beneficiary of the research project	National University of Singapore
Research competences	I have acquired knowledge on advanced type systems used to verify and/or optimize the program at compile time. I have obtained results on three research directions: (i) Region-based memory management: I have formalized and implemented the first algorithm which automatically infers the regions for an object oriented language. (ii) Software Reusability via Better Generic Types: I have formalized and implemented a type system that can statically eliminate more program errors than Java type system (iii) I have designed and implemented a general framework Core-Java for type-based analyses for object oriented languages. The above results are part of my PhD thesis and they have also been published at PLDI 2004, OOPSLA 2006, ICCP 2006 and ICFEM 2008.
Dates	1999- 2001
Research project/ topic	Modelling and Simulation of Intelligent Agents for Internet Applications
Main activities and responsibilities	I have coordinated the research project. I was doing the following research activities: software prototype design and implementation, and scientific paper writing.
Name and address of the research project coordinator	Florin Craciun
Beneficiary of the research project	ANSTI, project 375, Ministry of Technology and Innovation, Romania
Research competences	I have studied different models for coordination and collaboration in multiagent systems. I have implemented a prototype based on Swarm and Prolog to evaluate the agents behaviour. The results have been published at CONTI 2000, SINTES 2000, IASTED AI 2000, MAS workshop Agents 2000, IDEAL 2000 and IEA/AIE 2001.

Florin Craciun

Floren Crăciun

Annex 8. Member in PhD Committees

- Ciprian Paduraru (2005, University of Bucuresti)
- Tibor Kiss (2006, Siemens and Babes-Bolyai University)

Annex 9. Teaching Experience

Dates	04/2014 - present
Occupation or position held	Associate Professor
Main activities and responsibilities	<ul style="list-style-type: none">• graduate courses: Methodologies for Software processes, Resource-aware Programming• undergraduate courses: Advanced Programming Methods, Virtual Machines, Verification and Validation• Coordinator of the master programme: Component-based Programming
Name and address of employer	Computer Science Departament, Faculty of Mathematics and Informatics, Babes-Bolyai University, M. Kogalniceanu street nr 1, Cluj-Napoca
Dates	10/2012 -04/2014
Occupation or position held	Lecturer
Main activities and responsibilities	<ul style="list-style-type: none">• graduate courses: Methodologies for Software processes• undergraduate courses: Advanced Programming Methods
Name and address of employer	Computer Science Departament, Faculty of Mathematics and Informatics, Babes-Bolyai University, M. Kogalniceanu street nr 1, Cluj-Napoca
Dates	10/2010 -02/2012
Occupation or position held	External Part-time Lecturer
Main activities and responsibilities	<ul style="list-style-type: none">• graduate courses: Methodologies for Software processes

Name and address of employer	Computer Science Department, Faculty of Mathematics and Informatics, Babes-Bolyai University, M. Kogalniceanu street nr 1, Cluj-Napoca
Dates	2003-2007
Occupation or position held	Teaching Assistant
Main activities and responsibilities	<ul style="list-style-type: none"> • undergraduate course: Programming Language Concepts (seminars, laboratories) • graduate course: Advanced Topics in Programming Languages(laboratories)
Name and address of employer	School of Computing, National University of Singapore, 13 Computing Drive, Singapore 117417
Dates	02/2001 – 02/2002
Occupation or position held	Assistant Lecturer
Main activities and responsibilities	<ul style="list-style-type: none"> • Undergraduate courses: Introduction in Artificial Intelligence (seminars and laboratories), Artificial Intelligence (seminars and laboratories) • graduate courses: Intelligent Systems(seminar and project)
Name and address of employer	Department of Computer Science, Faculty of Automatics and Computer Science, Technical University of Cluj-Napoca, 28, Gh. Baritiu St., 400027, Cluj-Napoca Romania
Dates	02/2001 – 02/2002
Occupation or position held	Junior Lecturer
Main activities and responsibilities	<ul style="list-style-type: none"> • Undergraduate courses: Introduction in Artificial Intelligence (seminars and laboratories), Artificial Intelligence (seminars and laboratories) , Graphical User Interface (laboratories)
Name and address of employer	Department of Computer Science, Faculty of Automatics and Computer Science, Technical University of Cluj-Napoca, 28, Gh. Baritiu St., 400027, Cluj-Napoca Romania
Dates	1997-1998
Occupation or position held	Instructor
<i>Floren Ciocanu</i> and es	<ul style="list-style-type: none"> • Course: Programming in Oracle

Name and address of employe	Soros Foundation, Cluj-Napoca
--------------------------------	-------------------------------

Florin Crăciun

Annex 10. References

Prof. Wei-Ngan CHIN
Associate Professor in Computer Science
School of Computing,
National University of Singapore,
13 Computing Drive,
Singapore 117417
chinwn@comp.nus.edu.sg

Prof. Siau-Cheng KHOO
Associate Professor in Computer Science
School of Computing,
National University of Singapore,
13 Computing Drive,
Singapore 117417
khoosc@comp.nus.edu.sg

Prof. Shengchao QIN
Professor in Computer Science
Department of Computer Science,
University of Teesside,
Middlesbrough TS1 3BA, U.K.
s.qin@tees.ac.uk

Prof. Martin C. RINARD
Professor in Computer Science
MIT Computer Science and Artificial Intelligence Laboratory
The Stata Center, Building 32-G744
32 Vassar Street
Cambridge, MA 02139, USA
rinard@lcs.mit.edu

Florin Craciun

