Professor Dr. Ing. Nicolae Goga
University Politehnica Bucharest, Romania
Visiting Researcher,
University of Groningen, the Netherlands
n.goga@rug.nl

**Europass
Curriculum Vitae**

**Personal information**

First name(s) / Surname(s) | Nicolae  Goga

Address(es) | Fainari, Nr. 24, Bloc 51, Ap 75, Sect 2, Bucuresti

Telephone(s) | Mobile:   0763-965787

Fax(es) |

E-mail | n.goga@rug.nl

Nationality | Romanian/ Permanent Residence Permit for the Netherlands

Date of birth | 07-04-1973

Gender | Male

**Work experience**

Dates | October 2011 - prezent

Occupation or position held | Lecturer (2011-2013)/Associate  Professor (2013 – present)

Main activities and responsibilities |
- *Teaching*: Msc/Bachelor courses in *Software Engineering, Networking, Formal Languages, Formal Methods, Software Testing, Use of IT standards in Medical Informatics*
- *Research*: 1) **Coordinator UPB, EU  Eurica Project** – Project for EU/Latin America university exchanges at Postdoc/PhD/Msc/Bachelor levels (www.eurica.nl); 2) **Coordinator UPB: Ro - PN2 Project AIMMS** (Ro-PN-II-PT-PCCA-2013-4-0685); 3) **Coordinator UPB: EU Eurostar Project Premises** (to start in March 2015); supervising PhD and posdoc teams; working further in Molecular Dynamics Research with Emeritus Profesor Berendsen (http://www.hjcb.nl/) and in medical IT research with ISO/IEEE 11073 (http://standards.ieee.org/findstds/standard/healthcare_it.html)  and ISO/ANSI HL7 (www.hl7.org) groups for standards of medical IT (co-authoring 8 ISO/IEEE 11073 standards).
- *Thesis supervission*: Master and Bachelor levels

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| | - ***Double Degree Master for Software Engineering***: Politehnica Bucharest and University of Groningen  (http://www.rug.nl/masters/computing-science/programme) – ***Initiator and Coordinator UPB*** |
| Name and address of employer | Department of Engineering in Foreign Languages, University Politehnica of Bucharest, Splaiul Independentei 313, Bucharest, Romania |
| Type of business or sector | Computer Sciences |
| Dates | 2006- 2011 |
| Occupation or position held | Senior Researcher |
| Main activities and responsibilities | - *Research*: Molecular Dynamics research in algorithms (physics site) and implementation development (computer science part). Molecular Dynamics is a interdisciplinary domain at the intersection of physics, chemistry, computer science, biology, medicine, etc. Working in close cooperation with Emeritus Professor Herman Berendsen (http://www.hjcb.nl/). ***Two developed algorithms are part of Gromacs (www.gromacs.org)  package of molecular dynamics, being used by world-wide prestigious groups*** (Stanford Univ, Cambridge, etc.) and ***powerful companies*** (Intel, IBM, etc.). Obtaining and coordinating the research  grant *Improved parallel scaling of the Gromacs MD code* from NWO (Dutch Organisation for Scientific Research; www.nwo.nl). Supervising postdoc and PhD teams. <br> - Continuing the research in IT/ISO standards: ISO/IEEE 11073 and ISO/ANSI HL7. ***In this period I obtained IEEE Technology Merits Award, 2010, US Edition (http://www.rug.nl/news/2011/01/emergingtechnologyaward).*** <br> - Work of applying formal methods (FM) for medical IT standards was also recognised on website of Spin/Promela tool, developed from Bell Labs, US (http://spinroot.com/spin/success.html). <br> - In 2006, together with Prof. Stegwee Robert, President HL7 Netherlands I ***helped staring HL7 Romania*** (http://www.hl7romania.ro/). From that moment till present I am its ***Honorary President***. |
| Name and address of employer | Molecular Dynamics Group, University of Groningen, the Netherlands (http://www.rug.nl/research/molecular-dynamics/) |
| Type of business or sector | Computational Chemistry |
| Dates | 2009- present |
| Occupation or position held | Visiting Lecturer/Trainer |
| Main activities and responsibilities | - *Online teaching*: in Caribbean Islands from an US Accredited Master from Andrews University, Michigan, US. Topics: *Research Methods and Statistics* <br> - *Short Lecturing/Research Visits*: in Africa in several universities from Ghana, Nigeria, Zambia, Kenya. Topics of lectures/research: Distributed Systems, Medical Informatics, Software Engineering, Computer Vision, etc. In Nigeria I was called to be part of an international accreditation team for the PhD program at Babcock University, Ilishan Remo State. <br> - *Training*: Online HL7 Course in Medical IT from HL7 International (www.hl7.org) with US diploma. I gave training in US (2009) and Romania (2010 - present). I trained in Romania experts from many companies including Siveco, UTI, Teamnet, InfoWorld, TotalSoft. The |

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| | experts from UTI were designers for the National Electronic Health Record System of Romania. |
| Name and address of employer | - Andrews University, Michigan, US<br>- Babcock University, Nigeria<br>- Valley View University, Ghana,<br>- Rusangu University, Zambia<br>- Adventist African University, Kenia<br>- HL7 Organisation, US |
| Type of business or sector | Computer Science |
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| Dates | 2002-2006 |
| Occupation or position held | Researcher |
| Main activities and responsibilities | Research in the application of formal methods for improving the protocol of communication for IEEE 1394.1 standards, ISO/IEEE 11073 and ISO/ANSI HL7 standards within the context of NWO/IQPS project (http://www.win.tue.nl/oas/iqps/). During the period of maternal leave of Dr.Judi Romeijn I was the coordinator of the NWO/IQPS project. I represented all the time the Eindhoven group at ISO/IEEE 11073 meetings and I become part of the standardisation group. In 2005 I obtained the second PhD degree from Politehnica Bucharest under the coordination of Prof. Dr. Eng. Florica Moldoveanu. |
| Name and address of employer | Department of Mathematics and Computer Science, Technical University of Eindhoven, the Netherlands (http://www.tue.nl/en/university/departments/mathematics-and-computer-science/) |
| Type of business or sector | Research – Mathematics and Computer Science |
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| Dates | 2005 |
| Occupation or position held | Part Time Researcher (the rest of the time in Eindhoven) |
| Main activities and responsibilities | Research in Software Testing for the *ITEA EU Project TT-Medal* (https://itea3.org/project/tt-medal.html) |
| Name and address of employer | *CWI – Dutch National Centre for Mathematics and Computer Science*, Amsterdam, the Netherlands (http://www.cwi.nl/) |
| Type of business or sector | Computer Science |
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| Dates | 1998-2002 |
| Occupation or position held | Assistant in Research |
| Main activities and responsibilities | Researcher in the field of formal testing for completion of PhD within Cotes-de-Resyste STW Project (http://fmt.cs.utwente.nl/CdR/) |
| Name and address of employer | *Employed:* Twente University, the Netherlands (http://www.utwente.nl/)<br>*Working Place:* Department of Mathematics and Computer science, University of Eindhoven, the Netherlands |
| Type of business or sector | Computer Science |
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| Dates | 1997-1998 |
| Occupation or position held | Teaching Assistant |

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| Main activities and responsibilities | - *Teaching (laboratory level): Graphics, Computer Vision, Networking, Assembling Language, Hardware CS Components* |
| Name and address of employer | Department of Computer Science, Politehnica University of Bucharest |
| Type of business or sector | Computer Science |

**Education and training**

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| Dates | 2002-2005 |
| Title of qualification awarded | Second Ph.D |
| Principal subjects/occupational skills covered | Thesis Title: *"Contributions to the Modeling and Verification of Reactive Systems"* under the supervision of Prof. Dr.Ing. Florica Moldoveanu |
| Name and type of organisation providing education and training | Department of Computer Science, Politehnica University of Bucharest, Romania, |
| Level in national or international classification | ISCED 8 |

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| Dates | 1998-2004 |
| Title of qualification awarded | First PhD |
| Principal subjects/occupational skills covered | Thesis Title: *Control and selection techniques for the automated testing of reactive systems* under the *supervission of Prof. Dr. Ir. Loe Feijs* |
| Name and type of organisation | Department of Mathematics and Computer Science, Technical University of Eindhoven, the Netherlands |
| Level in national or international classification | ISCED 8 |

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| Dates | 1996-1997 |
| Title of qualification awarded | Master |
| Principal subjects/occupational skills covered | Profile: *System Science and Computers* with specialization in *Application Programs and Artificial Intelligence* |
| Name and type of organisation providing education and training | Faculty of Automatics and Computer science, Politehnica University of Bucharest, Romania |
| Level in national or international classification | ISCED 7 |

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| Dates | 1991-1996 |
| Title of qualification awarded | Bachelor |
| Principal subjects/occupational skills covered | Profile: *Electrics* with specialization in *Computer Science* |
| Name and type of organisation providing education and training | Faculty of Automatics and Computer science, Politehnica University of Bucharest, Romania |
| Level in national or international classification | ISCED 6 |

**Personal skills and competences**

| | Mother tongue(s) | **Romanian** |
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**Other language(s)**

**English, Dutch**

| | Understanding | | | | Speaking | | | | Writing | |
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| | Listening | | Reading | | Spoken interaction | | Spoken production | | | |
| **English** | C1 | Proficient user | C1 | Proficient user | C1 | Proficient user | C1 | Proficient user | C1 | Proficient user |
| **Dutch** | B1 | Independent user | B1 | Independent user | B1 | Independent user | B1 | Independent user | B1 | Independent user |

*(\*)* *Common European Framework of Reference for Languages*

**Social skills and competences**

- Inter cultural skills: ability to adapt to multicultural environments gained through my long periods spend in other countries (the Netherlands) and visits around the world (Africa, North and Latin America, Europe, etc.)
- Communication skills gained through my experience as lecturer/researcher
- Team work gained through my work as researcher, lecturer, team leader
- Leadership gained through the lead of several research proposals

**Organisational skills and competences**

- Leadership: Leader of several Research projects successfully completed
- Team work: gained through the work as research, lecturer and team member or leader

**Technical skills and competences**

- *Reviewer* for several International Conferences such as *European Conference in Evolutionary Music and Art*, *IEEE System Conference*, Journal of *Computer Methods and Programs in Biomedicine, Journal of Philosophical Transactions A, etc.*
- *Engineer, Researcher, Lecturer*
- *Part of an International Accreditation team for an university in Nigeria*

**Computer skills and competences**

- *E-learning* - Moodle platform,
- *Skills ranging from programming to design and research in many CS* languages (C, C#, Java, Lisp, CUDA, Assembling, etc.) in Networking, Distributed Systems, Artificial Intelligence, Software Engineering, Graphics, Assembling, Medical Informatics etc.
- *Interdisciplinary (technical):* Molecular Dynamics and Numerical Methods for Composite Materials
- *Interdisciplinary (social):* Educational Science

**Artistic skills and competences**

Piano as a hobby

**Other skills and competences**

- Working in helping organisation for street children (while I was a student)
- Getting helps for an orphanage in Romania while residing in the Netherlands

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| Driving licence | Yes |

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| **Additional information**<br>Publications | - *Publications*: see *Article Document*<br><br>- *Research Grants:*<br>  - **Pi.** *Coordinator UPB: EU Eurostar Project Premises- 900.000 Euro* (to start in March 2015)<br>  - **Pn.** *Coordinator UPB: Ro - PN2 Project AIMMS* (Ro-PN-II-PT-PCCA-2013-4-0685) – 1.200.000 RON**;**<br>  - **Pi.** *Coordinator UPB*– Erasmus Mundus *Eurica* Grant – fellowships for Postdoc/PhD/Msc/Bachelors between Latin America and Europe, 2013-2016, 4 milions Euro<br>  - **Pi**. *Main Investigator:* Eureka Project Questor, 375000 Euro, 2012-2014<br>  - **Pi** *Director* NWO parallelisation project: "*Parallelisation of novel algorithms in Gromacs*", 42000 Euro<br>  - **Pi** *Director,* Managing Wireless Medical Devices Course Development Grant, Virtually University of Bavaria („Virtuelle Hochschule Bayern"), Germany, 2012, 4000 Euro<br>  - **Pi**. *Director, Management of Internet of Things for Telehealth Applications* Grant, Virtually University of Bavaria („Virtuelle Hochschule Bayern"), Germany, 2011, 4300 Euro<br>  - **Pi** *Director* in the time of maternal leave of Dr. Judi Romijn: NWO (*Netherlands Organisation for Scientific Research*) project: "*Improving the Quality of Protocol Standards"*, 300.000 Euro<br><br>- *Awards and Recognitions*:<br>  – Honorary President *HL7 Romania* (http://www.hl7romania.ro/) – organisation that includes key institutions in medical informatics from Romania.<br>  – *2010 IEEE-SA Emerging Technology Awards (see* http://www.rug.nl/fwn/nieuws/fwnActueel/kortNieuws/kortnieuwstabel/EmergingTechnologyAward)<br>  – General Committee Member of ISO/IEEE 11073 group<br>  – Mentioned in *Who is Who in Science, US., 2007.*<br>  – Work of applying formal methods (FM) for medical IT standards was also recognised on website of Spin/Promela tool, developed from Bell Labs, US (http://spinroot.com/spin/success.html).<br>  – Invited Speaker *Conquest Conference*, Germany, 2009 |