

Lucian CARATA

PERSONAL DATA

PLACE & DATE OF BIRTH: Iasi, Romania | 3rd of May , 1986
CURRENT ADDRESS: 79 High Street, Cherry Hinton,
Cambridge, CB1 9LU, United Kingdom

PHONE: (+44) 7741 682 514
EMAIL: lc525@cam.ac.uk
WEB: <http://www.cl.cam.ac.uk/~lc525/>



EDUCATION

CURRENT **PhD**, Digital Technology Group, Computer Laboratory, University of Cambridge
Research on using data provenance in heterogeneous environments.

APRIL 2011 **Master of Science in Distributed Systems**, Technical University of Iasi, Romania
One semester Erasmus scholarship at the Vienna University of Technology,
Research in the Institute of Computer Graphics and Algorithms

JUNE 2009 **Bachelor of Engineering in Information Technology**, Technical University of Iasi
Thesis: "Object Recognition in Video Sequences Using Interest Point Detection"
Advisor: Prof. Vasile Manta, Thesis Evaluation: 10/10
CGPA: 9.95/10; ranked *first* in class of 120 | Detailed list of exams on request

JULY 2005 **Bacalaureat Diploma**, Costache Negruzzi High school, Iasi
FINAL GRADE: 9.87/10

PUBLICATIONS

Carata, L., Shao, D., Hadwiger, M., and Gröller, E. (2011). Improving the visualization of electron-microscopy data through optical flow interpolation. In *Proceedings of the 27th Spring Conference on Computer Graphics*, pp. 1–8.

Carata, L. and Manta, V. (2010). The influence of chromatic and luminance noise in real-time object recognition using scale-invariant descriptors. In *14th International Conference on System Theory and Control, Sinaia, Romania*.

Carata, L. and Manta, V. (2009). Using feature detection algorithms in shape recovery and deformation measurement. In *Proceedings of the 5'th International Conference on Manufacturing Systems*, vol. LV(LIX), Fasc.4, pp. 37–44.

INTERNSHIPS

JUN-SEP 2010	Microsoft Intern - Seattle, USA <i>Online Services Division, AdCenter Performance Team</i> Developing internal tools for automated performance analysis in large-scale distributed systems.
JUN-SEP 2007	Intern at Code4o - Iasi, Romania <i>Microprojects</i> A pilot application for Holland Banks, enabling investors to finance small projects online. For my contributions to the project, I have received the "Green Eminence" award.

AWARDS AND SCHOLARSHIPS

- OCT 2011 Cambridge Home and EU Scholarship Scheme (CHESS) Bursary
- OCT 2011 EPSRC Doctoral Training Studentship, 3 years
- OCT 2010 Erasmus Scholarship (5 months) at the Vienna Institute of Technology, Austria - Institute of Computer Graphics and Algorithms.
Research focused on complex medical dataset visualization.
- MAY 2009 Student Scientific Communication Sessions (TUIASI University), award for the best paper describing an original solution
- OCT. 2008 A one-year special *Research Scholarship*, awarded by the Technical University of Iasi, for outstanding academic achievements
- OCT. 2008 ACM Southeastern Europe Programming Contest, Honorable Mention
- MAY 2008 Hard & Soft International Contest, 2nd Prize (team of four)
- OCT. 2006 IEEE Computer Society CHC₆₀ competition, Honorable Mention, finalist | *Team leader* (team of four)
- MAY 2006 Student Scientific Communication Sessions (TUIASI University), Special Mention
- MAY 2005 Doors to Diplomacy competition, 6th place, finalist. (team of three)
- MAY 2004 County Informatics Olympiad, 1st Mention
- MAY 2003 County Informatics Olympiad, 3rd Place
- 2002, 2003 Excellency Diploma from the Regional Center of Informatics for Young People Capable of Performance, Iasi
- MAY 1998 County Mathematics Olympiad, 1st Mention

UNDERGRADUATE RESEARCH WORK*

- | | |
|--------------|--|
| 2008-2010 | Object Recognition in Video Streams
Project name: <i>Cytrus</i>
A modular, cross-platform graphic framework, aimed at (soft) real-time data acquisition and processing. My bachelor research work was built upon this framework, focusing on parallelization and high throughput for object detection in video streams. |
| MAY-DEC 2009 | REST Service Discovery
Project name: <i>REdisc</i>
Investigating novel secure solutions for automated web service discovery and composition, using the ATOM protocol. Cross-domain discovery and federation are also addressed, and discovery is defined using existing web standards and IETF proposals. |
| JAN-OCT 2008 | Distributed Web Crawler
Project name: <i>UTICrawl</i>
Experimental crawler with intelligent workload distribution among worker nodes and low-communication (hash-based, hierarchical) load balancing. The web crawler has an agent-based design and tolerates network failures. |

* Selected list

TECHNICAL KNOWLEDGE

Programming:	Proefficient: C/C++ (including STL, Boost), C# (.NET), Java, Parallel programming (MPI, OpenMP), Matlab, XML (XSD, XSLT) Some experience: Ocaml, Python, JavaScript, HTML, CSS
System admin:	Linux networking, SAMBA, Apache, Kernel basics, Rendering clusters & GPGPU setup
Technologies:	OpenGL (advanced), CUDA, ASP.NET (advanced), J2EE, Microsoft Reporting Services (advanced), Windows Communication Framework (advanced), JADE (intermediate), LabWindows/CVI (advanced), UML Tools, \LaTeX
Databases:	Microsoft SQL Server, Oracle, MySQL
Testing:	JUnit, NUnit, Visual Studio Unit Testing Framework
Version Control:	Git, Subversion, Microsoft Team Foundation Server (TFS)

ORGANIZATIONAL AND SOCIAL SKILLS

- Organizer for yearly events and academic presentations in the Microsoft Center from my faculty. Teaching a weekly ASP.Net Laboratory (for 3 years). Regular speaker at technical community events.
- Trainer for a .NET Framework/ASP.NET one week course for Java/J2EE Senior Developers
- Undergraduate student representative in the Computer Engineering Faculty Council, having responsibilities in signaling and resolving academic community or organizational issues at faculty level.

LANGUAGES

ENGLISH: C1 Level (speaking, listening, writing), TOEFL (2011) Score: 115/120
 GERMAN: B1 Level (speaking, listening, writing), "Zertifikat Deutsch" Certification
 ROMANIAN: Mother tongue (native)

REFERENCES

Mr. Vasile MANTA, PhD
 Professor, Faculty Dean,
 Technical University of Iasi Romania
 Bld. Dimitrie Mangeron nr. 53 A,
 700050 Iasi, Romania
 email: [vmanta \(at\) cs.tuiasi.ro](mailto:vmanta@cs.tuiasi.ro)

Mr. Eduard GRÖLLER, PhD
 Associate Professor of Practical Informatics,
 Vienna University of Technology, Austria
 Favoritenstrasse 9-11 / E186,
 A-1040 Wien, Austria
 email: [groeller \(at\) cg.tuwien.ac.at](mailto:groeller@cg.tuwien.ac.at)