

# Andrei Aurel Vancea

# Education

2009—present (Anticipated) Ph.D. in Informatics, University of Zurich, Switzerland.

2004–2005 **M.Sc. in Computer Science**, *Technical University of Cluj-Napoca*, Romania, *8.33/10*.

2004 Diploma Thesis at ETH Zurich (as an Erasmus exchange student)

1999–2004 **Dipl. Ing. in Computer Science**, *Technical University of Cluj-Napoca*, Romania, *9.09/10*.

# Work Experience

2009-present **Research and Teaching Assistant**, *University of Zurich*, Switzerland.

2006–2008 Research and Teaching Assistant, ETH Zurich, Switzerland.

2005 **Senior Software Engineer**, *Yonder IT Solutions (former Nethrom Software)*, Cluj-Napoca, Romania.

- Design and implementation of a visualization application for architectural projects
- Technologies: C++, OpenSceneGraph, OpenGL

2003–2004 **Software Developer (part time)**, *Nordlogic*, Cluj-Napoca, Romania.

- Design and Implementation of a monitoring application for telephone traffic
- Technologies: Delphi, Microsoft Access

2000 **Software Developer (internship)**, *Timteh Systems*, Timişoara, Romania.

- Design and implementation of a microcontroller-based GPS automobile monitoring system
- o Technologies: C, Delphi, Assembly

## Skills

Programming C/C++, Java, Python, Pascal/Delphi, Assembly, Prolog, ML,

Languages Lisp

System Ad- GNU/Linux, Windows

ministration

Written & Romanian (native), English (fluent), German (basic), French

Spoken (basic)

Languages

# Personal Details

Family Name Vancea

First Name Andrei

Middle Name Aurel

Nationality Romanian (B Permit)

Date of Birth September 22, 1980

Marital Single Status

# Research Projects

#### 2009-present CoopSC (Cooperative Semantic Caching).

- Design and implementation of a cooperative database caching solution
- Project funded by the Swiss National Science Foundations (SNF), Contract No. 200021-134679/1
- o Technologies: C++, STL, Boost library, Python, PostgreSQL

# 2006-2008 OMS Avon.

- Design and implementation of rapid prototyping object oriented data management system based on the OM data model
- Technologies: Java, db4o

#### 2004 **GEdit**.

- Design and implementation of an asynchronous collaborative graphical editor (part of the diploma thesis)
- Technologies: Java

## 2003 **DICOM**.

- Design and implementation of a medical reporting tool based on the DICOM standard
- Technologies: C++, Microsoft SQL Server

## 2003 PSP (Prolog Sever Pages).

- Design and implementation of an Apache module which allows developing web applications in Prolog
- Technologies: C, SWI Prolog

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# Professional Activities

- Teaching See http://www.csg.uzh.ch/staff/vancea#teaching
- Supervised See http://www.csg.uzh.ch/staff/vancea#thesis

**Thesis** 

Program AIMS 2012 (Ph.D. Student Workshop)

Committees

Reviewer AIMS 2012, AIMS 2011, NOMS 2010, ICC 2010, MMNS 2009, P2P 2009

# Awards, Competitions

- 2012 Best Paper Award,  $6^{th}$  International Conference on Autonomous Infrastructure, Management and Security (AIMS)
- 2003 Rank 17 of 49 teams, ACM Contest, South Eastern European Regional
- 2002 Rank 13 of 45 teams, ACM Contest, South Eastern European Regional
- 2001 Rank 18 of 46 teams, ACM Contest, South Eastern European Regional
- 2000 Rank 11 of 41 teams, ACM Contest, South Eastern European Regional
- 1999 2<sup>nd</sup> Prize at International Programming Contest, Chisinau, Moldova
- 1999 Honorable Mention, ACM Contest, South Eastern European Regional
- 1999  $1^{st}$  Prize at the National Informatics Olympiad
- 1999  $1^{st}$  Prize at the District Informatics Olympiad
- 1998  $2^{nd}$  Prize at the National Informatics Olympiad
- 1998  $1^{st}$  Prize at the District Informatics Olympiad
- 1998 Special Prize at Nemes Tihamer Contest, Budapest, Hungary
- $1997 \;\; 3^{rd}$  Prize at the National Informatics Olympiad
- 1997  $2^{nd}$  Prize at the District Informatics Olympiad

#### **Publications**

- C. Tsiaras, M. Waldburger, G. S. Machado, A. Vancea, B. Stiller, The Design of a Single Funding Point Charging Architecture, 18<sup>th</sup> EUNICE Conference on Information and Communications Technologie, Budapest, Hungary, August 2012
- O A. Vancea, G. S. Machado, L. d'Orazio, B. Stiller, Cooperative Database

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- Caching within Cloud Environments,  $6^{th}$  International Conference on Autonomous Infrastructure, Management and Security (AIMS), Luxembourg, Luxembourg, June 2012
- A. Vancea, L. d'Orazio, B. Stiller, Optimization of Flow Record Handling by Applying a Decentralized Cooperative Semantic Caching Approach, 13<sup>th</sup> IEEE/IFIP Network Operations and Management Symposium (NOMS), Maui, Hawaii, USA, April 2012
- A. Vancea, L. d'Orazio, B. Stiller, A Scalable Cooperative Semantic Caching (CoopSC) Approach to Improve Range Queries, CollaborateCom 2011: 7<sup>th</sup> International Conference on Collaborative Computing: Networking, Applications and Worksharing, Orlando, Florida, USA, October 2011.
- A. Vancea, B. Stiller, CoopSC: A Cooperative Database Caching Architecture, 19<sup>th</sup> IEEE International Workshops on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE 2010), Larissa, Greece, July 2010
- A. Vancea, B. Stiller, A Cooperative Semantic Caching Architecture for Answering Selection Queries, IFI Technical Report, University of Zurich, September 2009
- A. Vancea, B. Stiller, Answering Queries Using Cooperative Semantic Caching, 3<sup>rd</sup> International Conference on Autonomous Infrastructure, Management and Security (AIMS 2009), Twente, The Netherlands, July 2009
- A. Vancea, M. Grossniklaus, M. C. Norrie, Database-Driven Web Mashups, International Conference on Web Engineering (ICWE 2008), Yorktown Heights, New York, USA, July 2008
- M. C. Norrie, M. Grossniklaus, C. Decurtins, A. Spindler, A. Vancea, S. Leone, Semantic Data Management for db4o, 1<sup>st</sup> International Conference on Object Databases (ICOODB), Berlin, Germany, March 2008
- A. Vancea, M. Grossniklaus, M. C. Norrie, Generic Proxies Supporting Data Integration Inside the Database, 9<sup>th</sup> International Symposium on Distributed Objects and Applications (DOA) (Poster), Vilamoura, Portugal, November 2007
- D. Olinic, C. Homorodean, S. Nedevschi, F. Rusu, A. Smeu, I. Popa, A. Vancea, A Proposal for Structured Diagnosis Reporting in Echocardiography Using a DICOM Compliant Environment, Computers in Cardiology, Chicago, September 2004
- S. Nedevschi, D. Olinic, I. Popa, F. Rusu, A. Smeu, A. Vancea, C. Homorodean, Tools and methodology for DICOM SR in echocardiography, International Conference on Automation, Quality and Testing, Robotics (AQTR), Clui-Napoca, Romania, May 2004
- L. Miclea, S. Enyedi, L. Busoniu, M. Abrudean, I. Stoian, A. Vancea, Limited Resource Systems Testing with Microagent Societies, European Test Symposium (ETS), Ajaccio, France, May 2004
- S. Nedevschi, D. Olinic, I. Popa, F. Rusu, A. Smeu, A. Vancea, C.Homorodean, DICOM Compliant Structured Reporting Environment, BIOSIGNAL 2004,

- Brno, Czech Republic, June 2004
- A. Suciu, K. Pusztai, A. Vancea, Prolog Server Pages, Roedunet International Conference, Iași, Romania, June 2003

## References

- **Burkhard Stiller**, Professor of Computer Science, University of Zurich, Department of Informatics, Phone: +41 44 635 67 10, E-mail: stiller@ifi.uzh.ch
- Daniel Lar, Director of Software Development, Yonder IT Solutions, Cluj-Napoca, Phone: +40 264 599 351, E-mail: danilar@gmail.com
- Sergiu Nedevschi, Professor of Computer Science, Technical University of Cluj-Napoca, Department of Computer Science, Phone: +40 264 401 219, E-mail: Sergiu.Nedevschi@cs.utcluj.ro