

# Vlad Atanasiu

i am a software developer, paleographer and artist, with background in handwriting biometrics, image processing, geographical information systems, information visualization, art history, linguistics and middle eastern studies, as well as fiction and visual arts

## EDUCATION

- 2012- Ph.D. candidate, **Informatics**, University of Fribourg, Switzerland
- 2003-5 Post-Doc, Massachusetts Institute of Technology, USA
- 2004-5 · **Brain and Cognitive Sciences**, advisor: Ruth Rosenholtz; on exchange at Vision Research, Lighthouse International, New York, advisor: Aries Arditi;  
course work: somatosensory & motor systems, sensation and perception, scientific visualization, Japanese language, Japanese animation
- 2003-4 · **School of Architecture**, Aga Khan Fellowship, advisor: Naser Rabbat
- 1996-3 Ph.D., **Paleography, Art History, History**: The calligraphic phenomenon in Mamluk times (Egypt, Syria, 13<sup>th</sup>-16<sup>th</sup> centuries), School of Advanced Studies, Department of History and Philology / École Pratique des Hautes Études [EPHE], IV<sup>e</sup> Section, Paris, France, advisor: François Déroche  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2003phd.pdf>
- 1995-6 M.A., **Paleography**: Potential History—Of Letter Frequencies and Their Influence on Arabic Calligraphy, EPHE  
<http://www.waqwaq.info/atanasiu/studies/frequencies/>
- 1993-5 M.A., **Linguistics**: Lexical Families in "Lisân al-'arab" & Semantic Unity of <gh\*\*> roots, Department of Arabic & Islamic Studies, University of Provence [UP], Aix-en-Provence, France, advisors: Claude-France Audebert, Pierre Larcher  
<http://www.waqwaq.info/atanasiu/studies/lexicography/>
- 1990-3 B.A., **Middle Eastern Studies**: Meaning & Sound in "Maqâ'yis al-lughâ", a dictionary by Ibn Fâris (d. 395/1004), UP
- 1989 Admission on examination, **Telecommunications Engineering** Department, "Traian Vuia" Polytechnic University, Timisoara, Romania
- 1989 Baccalaureate in **Mathematics & Physics**, German language High School "Nikolaus Lenau", Timisoara, Romania

## LANGUAGES

- Natural Spoken/Written: Arabic (classical, Egyptian & Syrian dialects), English, French, German, Persian, Romanian  
Notions: Hebrew, Italian, Japanese, Turkish
- Formal Matlab, Java, Processing, PHP, MySQL, JavaScript, XML, HTML, Unix shell, Basic, MOS 6510 assembler



French & Romanian citizenship  
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## EMPLOYMENT

- 2012- Assitant, **Informatics**, University of Fribourg, Switzerland
- 2011-2 Visiting Professor, "Information Visualization", **Graz University**, Austria
- 2011 Researcher, computational forensics, **National Institute for Applied Sciences (INSA)**, Lyon, France
- 2010-1 R&D engineer, handwriting analysis and document retrieval, **Télécom ParisTech**, Paris, France  
<http://glyph.telecom-paristech.fr>
- 2010-1 Developer, website & tools for statistical geography on Iran, **Centre National de la Recherche Scientifique**, Paris  
<http://www.irancarto.cnrs.fr>
- 2009 Developer, online geographical database on Austrian dialects, **Institute for Lexicography of Austrian Dialects and Names**, Vienna, Austria  
<http://wboe.oeaw.ac.at>
- 2006-0 Senior Researcher, image processing and geographical information systems, Commission for Scientific Visualization, **Austrian Academy of Sciences**, Vienna, Austria
- 2006-9 Project management: conceived and co-coordinated the **European project** The Memory of Papers - Bernstein. Image based paper expertise and history (9 institutions, 6 countries, 3.2 million Euros budget, European Commission co-financing)  
<http://www.bernstein.oeaw.ac.at>, <http://www.memoryofpaper.eu>
- 2004-5 Visiting research scholar, software design and psychophysics experiments for improving handwriting legibility and display of textual information for people with low-vision, **Light-house International**, New York, USA
- Research internship, Commission for Scientific Visualization, **Austrian Academy of Sciences**, Vienna, Austria
- 2003 Installed and dispensed training for the AD751 software, Koninklijke Bibliotheek - **National Library of the Netherlands**, The Hague
- Image processing software development, Commission for Scientific Visualization, **Austrian Academy of Sciences**, Vienna, Austria
- 1998- **Book designer**, freelance
- 1997 **Digital fonts designer** for the scientific transliteration of Oriental languages (Oxford University Press, American University in Cairo, Laboratory of Egyptology, EPHE4, Paris)
- 1995-3 "Laboratory for Manuscripts of the Middle East", School of Advanced Studies, Department of History and Philology / **École Pratique des Hautes Études**, IV<sup>e</sup> Section, Paris, France.
- 1994-5 Tutor, Arabic language, history and civilization of the Middle East, **University of Provence**, Aix-en-Provence, France

## FIELD WORK

- 2007 **National Library of Egypt**, organized a staff training workshop in paper studies
- 2001 **French National Centre for Scientific Research mission in Iran** for Project "Manuscript Heritage"  
<http://www.waqwaq.info/atanasiu/projects/heritage/>
- 2000 **French National Centre for Research mission in Iran** for the digitization of the manuscript collection of the French Research Institute in Iran
- 1999 **French Institute of Research in Iran**, Teheran, prospecting on manuscript collections, epigraphy and contemporary calligraphers
- **French Institute for Arabic Studies in Damascus**, prospecting on manuscript collections
- 1998 **French Institute of Oriental Archaeology in Cairo**, study of Mamluk manuscripts, awarded the "International Mobility Fellowship" of the French Ministry of Education & Research
- 1993-4 **French Institute for Arabic Studies in Damascus**, training for research on the Middle East
- 1991-2 **Department of Arabic Studies in Cairo**, linguistic training center of the French Foreign Affairs Ministry

## AFFILIATIONS

- 1997- **Société Asiatique**, France

**PUBLICATIONS**

**BOOKS**

- 2014 **Expert Bytes—Computer Expertise in Forensic Documents: Players, Needs, Resources, and Pitfalls**, Boca Raton, CRC Press, 2014, x+198 p.  
<http://www.amazon.com/dp/1466591900/>,  
[http://www.waqwaq.info/atanasiu/studies/atanasiu2013expertbytes\\_addenda.pdf](http://www.waqwaq.info/atanasiu/studies/atanasiu2013expertbytes_addenda.pdf)
- 1999 De la fréquence des lettres et son influence en calligraphie arabe [**Of Letter Frequencies and Their Influence on Arabic Calligraphy**], Paris, L'Harmattan, 1999, 192 p.  
<http://www.waqwaq.info/atanasiu/studies/frequencies/>

**ARTICLES**

- 2011 **Forensic vs. Computing writing features as seen by Rex, the intuitive document retriever**, Proc. 1st Intl. Workshop on Automated Forensic Handwriting Analysis, 17-18 September 2011, Beijing, China, pp. 16-20.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2011features.pdf>
- Vlad Atanasiu, Laurence Likforman-Sulem, Nicole Vincent, **Writer Retrieval—Exploration of a Novel Biometric Scenario Using Perceptual Features Derived from Script Orientation**, in Proc. 11th Intl. Conf. on Document Analysis and Recognition, 18-21 September 2011, Beijing, China, pp. 628-632.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2011retrieval.pdf>
- **Rex Online**, Gazette du Livre Medieval, 56-57: 131-135.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2011rex.pdf>
- **Paleographers and Computer Scientists**, Gazette du Livre Medieval, 56-57: 122-123.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2011paleographersandcomputerscientists.pdf>
- Bernard Hourcade, Amandine Lebugle, Emanuel Giraudet, Poupak Rafii-Nejad, Vlad Atanasiu, **Irancarto : diffuser l'information spatiale pour analyser des questions controversées [Irancarto: publishing spatial data to analyze controversial questions]**, Colloque Fonder les Sciences du Territoire, 23-25 November 2011, Paris, France.
- 2008 Wenger Emanuel, Vlad Atanasiu, **Paper Expertise and Contextual Data Provided by the eContentPlus Project Bernstein**, Jan-Erik Levlin (ed.), IPH Congress Book Vol. 17 (29<sup>th</sup> International Congress of Paper Historians), Stockholm, IPH, 93-101.
- 2006 Wenger Emanuel, Vlad Atanasiu, **eContentPlus Projekt Bernstein. Das Gedächtnis der Papiere [eContentPlus Project Bernstein. The Memory of Papers]**, Jan-Erik Levlin (ed.), Proc. 2006 EVA Conf. (Electronic Information, the Visual Arts and Beyond), Berlin, 65-69.
- 2006 The President and the Calligrapher: Arabic Calligraphy and Its Political Use [extended version: **futility subverted. The instrumentalization of calligraphy in Middle Eastern politics**], Studies in Architecture, History and Culture. Papers by the 2003-2004 AKPIA@MIT visiting fellows, Aga Khan Program for Islamic Architecture at MIT, 2006, p. 7-20.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2006politics.pdf>
- Les allographes comme mesure biométrique et la synthèse du comportement [**Allographic biometrics and behavior synthesis**], Cahiers GUTenberg, 46-47 (2006): 5-15.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2006allographs-fr.pdf>
- 2004 **Assessing paper origin and quality through large-scale laid lines density measurements**, Rosella Graziaplana, Mark Livesey (ed.), Paper as a medium of Cultural Heritage. Archeology and Conservation (Proc. 26<sup>th</sup> Cong. of the International Paper Historians Association, 30 August - 6 September 2002, Rome/Verona, Italy), 172-184.  
<http://www.waqwaq.info/atanasiu/software/ad751/atanasiu2004ad751en.pdf>
- Les réalités subjectives d'un paléographe arabe du X<sup>e</sup> siècle [**Subjective realities of a 10<sup>th</sup> century paleographer**], Gazette du Livre médiéval, 43 (2004): 14-22.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2004nadim.pdf>
- 2003 **Allographic biometrics and behavior synthesis**, TUGboat [Proc. 14<sup>th</sup> European TEX Conf. (24-7 June 2003, Brest, France)], 24.3 (2003): 998-1002.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2003allographs-en.pdf>
- 2002 Le traitement des images et son application à l'histoire du papier - La mesure à grande échelle de la densité de vergeures [**Image analysis and its application to the history of paper—Large-scale measurement of laid lines densities**], Gazette du Livre médiéval, 41 (2002): 31-41.  
<http://www.waqwaq.info/atanasiu/software/ad751/atanasiu2004ad751fr.pdf>
- 2001 5170 marches jusqu'à Dieu - Traditions musulmanes relatives à la Tour de Babel et à la confusion des langues [**5170 steps until God—Muslim traditions concerning the Tower of Babel and the confusion of languages**], Annales Islamologiques, 35 (2001): 1-16.  
<http://www.waqwaq.info/atanasiu/studies/atanasiu2001babel.pdf>
- 2000 Le Retroencrage - Analyse du ductus des écritures d'après le dégradé du coloris de l'encre [**Retroinking—finding the direction of writing from the intensity of ink**], Gazette du Livre médiéval, 37 (2000): 34-42.  
<http://www.waqwaq.info/atanasiu/studies/retroencrage/>
- 1997 Calligraphie à 50Hz ou l'art de l'écriture influencée par la fréquence des lettres [**Calligraphy at 50 Hz or the art of writing influenced by the frequency of letters**], Proc. AFEMAM-EURAMES Conf. (4-7 July 1996, Aix-en-Provence, France).

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**TECHNICAL REPORTS**

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- 2011 **Computational Handwriting Analysis**,  
Télécom ParisTech, Paris. [http://www.waqwaq.info/atanasiu/studies/  
atanasiu2004hwa.pdf](http://www.waqwaq.info/atanasiu/studies/atanasiu2004hwa.pdf)
- 2004 **Topics, actors and software surveys in  
handwriting analysis**, Austrian Academy of  
Sciences. 1992 **Ghagars of the Nile Delta. An Ethnographic  
and Linguistic Study** (private commission),  
40 p.

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**WEB PUBLICATIONS**

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- {url}: [http://www.bernstein.oeaw.ac.at/twiki/  
bin/view/Waqwaq](http://www.bernstein.oeaw.ac.at/twiki/bin/view/Waqwaq) {url}/PubAtanasiu2009Yersinia
- 2010 **Avatars in Real Life: Placename homonymy  
in Iran** 2004 **A Japanese Gaze. Using space to represent  
time and meaning in Japanese animation**  
{url}/PubAtanasiu2010HomonymyIran [http://www.waqwaq.info/atanasiu/studies/  
atanasiu2004anime-mit.pdf](http://www.waqwaq.info/atanasiu/studies/atanasiu2004anime-mit.pdf)
- **Inimitable handwriting. Graphical specifici-  
ties of copying the Qur'an** 1999 **Devil in the Gaze. Depicting social non-con-  
formism in Harîrî's Maqâmât**  
[http://www.waqwaq.info/atanasiu/studies/  
atanasiu2010iajaz.pdf](http://www.waqwaq.info/atanasiu/studies/atanasiu2010iajaz.pdf) [http://www.waqwaq.info/atanasiu/studies/  
maqamat/](http://www.waqwaq.info/atanasiu/studies/maqamat/)
- 2009 **7385 Swabian bulls and 2 Viennese mer-  
maids: Interpreting the Bernstein cartogra-  
phy of papers and watermarks** 1997 **Donne-moi ton regard, je t'offrirais l'immor-  
talité - Apologie pour la sociologie du regard  
[Give me your gaze, I will offer you Immortali-  
ty—Apologue for a sociology of the gaze]**  
{url}/PubAtanasiu2009SwabianBulls [http://www.waqwaq.info/atanasiu/studies/  
atanasiu1998regards.pdf](http://www.waqwaq.info/atanasiu/studies/atanasiu1998regards.pdf)
- **The Score of Death. Plague Epidemics in  
Europe 1347-1600**

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**REVIEWS**

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- [http://www.waqwaq.info/atanasiu/studies/  
reviews/](http://www.waqwaq.info/atanasiu/studies/reviews/) **Writing Art History in Sixteenth-Century Iran**,  
Leiden, E.J. Brill, 2000 / reviewed in *Abstracta  
Iranica*, 24 (2001): 82-3.
- 2010 Yuka Kadoi, **Islamic Chinoiserie**, Edinburgh,  
Edinburgh University Press, 2010 / reviewed in  
*Abstracta Iranica*. — W. M. Thackston, **Album Prefaces and Other  
Documents on the History of Calligraphers  
and Painters**, Leiden, E.J. Brill, 2000 / re-  
viewed in *Abstracta Iranica*, 24 (2001): 84-4.
- 2003 David J. Roxburgh, **Prefacing the Image: The**

## SOFTWARE

- 2011- Rex: **browser for (hand)writing document retrieval**  
<http://glyph.telecom-paristech.fr/rex/>
- 2010-2 Irancarto: **statistical geography database on Iran**  
<http://www.irancarto.cnrs.fr>
- 2008- Waqwaq: **online geographical information system** visualization software  
<http://www.waqwaq.info/ws/main/main.html>,  
<http://www.waqwaq.info>
- 2000-4 Kabikadj: **database software for cataloguing manuscripts**  
<http://www.waqwaq.info/atanasiu/projects/kabikadj/>
- 2003 BlueNile: **enhancement & suppression of regular patterns** in digital images  
<http://www.waqwaq.info/atanasiu/software/bluenile/>
- 2003- Open Source **Matlab code**  
<http://www.mathworks.com/matlabcentral/fileexchange/?term=authorid:5199>
- 2002 AD751: **measurement of laid lines densities in papers**  
<http://www.waqwaq.info/atanasiu/software/ad751/>
- 1997 **Digital font** for the scientific transliteration of Oriental languages (Oxford University Press, American University in Cairo, Laboratory of Egyptology, EPHE4, Paris)

## FICTION

- <http://www.waqwaq.info/atanasiu/index.html#fiction>
- 2008- Geolocated Poetry (poetry on Google Maps)
- 2004- fresh Sushi News (occasional newspaper)
- The Globe (illustrated short story)
- 1998 La chaise de Richelieu [Richelieu's chair] (short story)
- Le Moustique [The fly], Le Lien, Revue de l'Association Démocratique des Français à l'Étranger, Cairo, November 1998, p. 14-15.
- 1994 Virgule d'Orient ou comment fut construit Babel [Oriental commas—or how Babel was build], (pamphlet, illustrated / partially reproduced in Les Écritures, Paris, Bibliothèque Nationale, 1997, p. 72)
- 1992 Thalatha Qisas [Three stories] (stories in Arabic)
- 1991- UKW / Ultra Kurze Werke (ultra short stories)
- 1990 Le Divan bleu [The Blue Divan] (novel)

## VISUAL ARTS

- <http://www.waqwaq.info/atanasiu/index.html#art>
- 2009 Logo for Moneta, iPhone application
- 2008- Sol, digital font
- Logo for the Historians of Islamic Art Association
- 2006-7 Website, European Project Bernstein
- 2003- Impossible books (objects - private collection Cristina Pallini, Italy-USA)
- 2000 Art Slash Life, Art/Life, Ventura, California, 5 (2000)
- 1999 Website, the painter Delia Dumitrascu, Timisoara, Romania  
<http://www.waqwaq.info/atanasiu/art/dumitrascu/>
- 1996 Website, Professor Solange Ory, University of Aix-en-Provence, France
- 1970- Look through my eyes. Photography

## CALLIGRAPHY

- <http://www.waqwaq.info/atanasiu/art/calligraphy/>
- 1994 Student of calligrapher Adnân Sanaqnaqi in Damascus, Syria (nasta'liq calligraphic style)
- 1993 Follows the teaching of master Hassan Celebi in Istanbul, Turkey (ruq'a calligraphic style)
- 1992-3 Noviciate with Prof. Solange Ory at the University of Provence, Aix-en-Provence, France

## OUTDOORS

Sky diving, Paragliding, Alpine ski, Mountain-eering, Scuba diving, Sail-surfing