Vlad Atanasiu

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Education

2012 – 2023	**Ph.D. Computer Science**, Human Factors as Constraints and Solutions in Document Processing, University of Fribourg, Switzerland
2003 – 2005	**Post-Doc Art History & Cognitive Science**, Massachusetts Institute of Technology, Cambridge, MA, USA
1996 – 2003	**Ph.D. History & Art History**, Hypercalligraphy: The calligraphic phenomenon in Mamluk times (Middle East, 13th–16th century), École Pratique des Hautes Études, Paris, France
1995 – 1996	**M.A. Paleography**, Of Letter Frequencies and Their Influence on Arabic Calligraphy, École Pratique des Hautes Études, Paris, France
1993 – 1995	**M.A. Linguistics**, Lexical Fields in "Lisān al-'arab" & Semantic Unity of <gh**> roots, University of Provence, Aix-en-Provence, France
1990 – 1993	**B.A. Middle Eastern Studies**, Meaning and Sound in "Maqāyīs al-lugha", a dictionary by Ibn Fāris (d. 395/1004), University of Provence, Aix-en-Provence, France
1989	**Admission, Telecommunications**, Polytechnic University, Timișoara, Romania
1989	**Baccalaureate, Science**, "Nikolaus Lenau" German High School, Timișoara, Romania

Languages

Natural	English, French, German, Romanian, Arabic (classical, Egyptian & Syrian dialects), Persian — Notions: Italian, Japanese, Hebrew, Turkish; Ancient Near Eastern & Semitic languages and scripts (e.g., Akkadian, Egyptian, Pre-Islamic Arabic, South Arabic)
Formal	Matlab, Java, Python, JavaScript, D3, Processing, XML, HTML, CSS, PHP, PhpMyAdmin, PostgreSQL, MySQL, Unix shell, Basic, MOS 6510 assembler; Aseba for Thymio robots; ESRI ArcGIS Python, Web API, & desktop; Blender; Adobe InDesign IDML, scripting, & GUI; LaTex, FontLab

Research & Development Employment

2025.05 – 12	**Researcher in machine learning for script design**, Department of Informatics, University of Fribourg, Switzerland — Designing shape sets with maximal distinctiveness to improve legibility and study the evolution of writing
2024.02	**Full-stack web designer**, PTT-Archive, Köniz, Switzerland — Development of the Swiss historical phonebooks, 1880–1950, website. https://historic.localsearch.ch
2021.06 – 2024.01	**Digital humanities computer scientist in natural language processing, statistics, visualization, web design**, Digital Humanities, University of Bern, Switzerland — Full-stack web development of the Swiss historical phonebooks online application / Entity names labelization of historical Swiss phone books for the PTT-Archive / Quantitative data analysis of the Swiss National Library catalog Helveticat for the exhibition "Political Representation" / Improved the OCR of historical archival documents through natural language and image post-processing / Interactive visualization of historical Swiss charters / Graphic design
2020.10 – 2021.01	**Researcher in document processing**, School of Engineering and Architecture, Fribourg, Switzerland — Automated the classification and visualization of 1.3 million scanned catalog cards of the Swiss National Library
2019.02 – 2021.01	**Researcher in handwriting analysis & legibility enhancement**, Department of Ancient Studies, University of Basel, Switzerland — Software development of "Hierax" for legibility enhancement of papyri using color processing and visual illusions. https://hierax.ch — Testimonial: "Such a useful tool was incredibly needed in our papyrological community." Chiara D'Agostino
2017.09 – 2018.06	**Researcher in computer science (document processing & visualization)**, School of Engineering and Architecture, Fribourg, Switzerland — Elaborated the mathematical theory of structural information potential to estimate image informativeness
2016.04 – 08	**Researcher in graph visualization**, School of Engineering and Architecture, Fribourg, Switzerland — Conceived a technique to visualize the graph edit distance
2012.09 – 2015.06	**Researcher in document processing & visualization**, Department of Informatics, University of Fribourg, Switzerland — Conceived "Document Towers", a panoramic visualization based

on an architectural metaphor for exploring the physical structure of digital documents and libraries when precise linguistic queries are infeasible and speed is critical

2011.09 – 12 **Research analyst in computational document forensics**, National Institute for Applied Sciences (INSA), Lyon, France — Surveyed the state of the art in computational document forensics, a work subsequently published in book form

2010.09 – 2011.06 **Researcher in handwriting analysis**, Télécom ParisTech, Paris, France — Carried out research on automated handwriting analysis and developed "Rex", a Web application for writer retrieval, a neologism since adopted by the document analysis community. https://glyph.telecom-paristech.fr

2010.09 – 2011.06 **Full-stack web designer of a geographical information system (GIS)**, National Center for Scientific Research (CNRS), Paris, France — Back and front end programming of "Irancarto", the online statistical atlas of Iran. http://www.irancarto.cnrs.fr

2009.04 – 06 **Researcher in GIS, visualization, web design**, Institute for Lexicography of Austrian Dialects and Names, Austrian Academy of Sciences, Vienna, Austria — Programed an interactive Web-based visualization of the geographical spread of Austrian dialects and designed a physical three-dimensional model thereof

2006.01 – 2010.06 **Researcher in image enhancement, GIS, visualization**, Commission for Scientific Visualization, Austrian Academy of Sciences, Vienna, Austria — Investigated the historiography of paper studies and its impact on its computational modeling / Created "Waqwaq", image processing, data quality control, georeferencing, & geographical information system software suite for historical paper analysis. https://bernstein.oeaw.ac.at

2004.09 – 2005.06 **Visiting scholar in the visual psychology of script legibility**, Lighthouse, New York, USA — Contributed to psychophysical and computational research on improving script legibility for people with low vision

2003.09 – 2005.06 **Postdoctoral fellow in Islamic art history & Brain and cognitive sciences**, Massachusetts Institute of Technology, Cambridge, MA, USA — Course work: somatosensory & motor systems, sensation and perception, scientific visualization, Japanese language, Japanese animation

2003.07 – 09, 2004.07 – 09, 2005.07 – 12 **Researcher in image processing**, Commission for Scientific Visualization, Austrian Academy of Sciences, Vienna, Austria — Research in image processing for analyzing historical watermarks and paper structures

2003.11 **Consultant for image processing**, National Library of the Netherlands, The Hague / Istituto Centrale di Patologia del Libro, Rome — Installed and dispensed training for the AD751 software, resulting in automating the analysis of 21,000 paper reproductions

1996.09 – 2003.07 **Researcher in digital manuscripts cataloging, image processing, web design**, Centre National de la Recherche Scientifique, Paris, France — Developed analytical methods for dating papers based on their laid lines structure and implemented them in the AD751 software. https://waqwaq.info/software/ad751/

1997.09 – 12 **Font designer**, Oxford University Press, American University in Cairo, Laboratory of Egyptology, École Pratique des Hautes Études, Paris — Created fonts for scientific transliteration

1996.09 – 2003.06 **Full-stack web designer**, Manuscript collection digitization project manager, École Pratique des Hautes Études, Paris, France — Programmed "Kabikadj", the first Web database of manuscripts in Arabic script / Indexed first Hidjra century Qur'anic manuscripts. https://waqwaq.info/projects/kabikadj/

Ongoing **Graphic designer**, freelance (selected customers: Éditions l'Harmattan, Paris; infoclio.ch, Berne; transcript Verlag, Bielefeld; Universities of Basel, Bern, Fribourg) — Graphic design: book layout, covers, logos, business cards, Web sites. https://waqwaq.info/index.html#art

Teaching

2021.06 – 2024.01 **Tutor in digital humanities**, Digital Humanities, University of Bern, Switzerland

2022.09 – 12 **Tutor in academic writing for computer science PhD students**, Department of Informatics, University of Fribourg, Switzerland — Mentoring in scientific writing & visualization — Supervisor testimonial: "I had the feeling of reading a entirely new thesis!" Rolf Ingold

2012.09 – 2015.06 **Lecturer in information representation for scientists,** Department of Informatics, University

of Fribourg, Switzerland — Taught information representation for computer scientists (in English & French) — Student testimonial: "Because of that class [. . .] I have landed 2 contracts doing D3 development in America. I appreciate the skillset I developed in that class as it will pay off greatly!"

2011.09 – 2012.02 **Lecturer in information visualization for humanists**, Centre for Information Modeling / Austrian Centre for Digital Humanities, Graz University, Austria — Taught information visualization for Humanities (English & German)

2007.10 **Instructor in paper studies**, National Library, Cairo, Egypt / The Islamic Manuscript Association (TIMA) — Trained library staff in paper studies (in Arabic)

1998.01 – 07 **Assistant for visually impaired people**, Private person, Paris, France — Assisted visually impaired persons to browse, read, and manage text-based documents

1994.09 – 1995.06 **Tutor in Arabic language**, University of Provence, Aix-en-Provence, France — Tutoring in Arabic language, and Middle Eastern history & civilization

Management

2018.09 – 12 **Academia–industry computer science project planner (InnoSuisse; document processing)**, Department of Informatics, University of Fribourg, Switzerland — Project architect for academia-industry-government collaborations on digital libraries (Swiss Federal Archives, Swiss National Library, Swiss Post, Sugarcube)

2017.09 – 2018.06 **Computer science project planner (Hasler Foundation)**, School of Engineering and Architecture, Fribourg, Switzerland

2016.09 – 2017.08 **International computer science project planner (Austrian–Flemish; computational history modeling)**, Chair of Digital Humanities, University of Vienna, Austria — Project architect for "Alice", Austrian–Flemish project on the use of computational logic for historical studies

2006.01 – 2010.06 **Computer science project planner & co-coordinator (European Commission, nine partners)**, Commission for Scientific Visualization, Austrian Academy of Sciences, Vienna, Austria — Project architect and co-coordinator of the European portal "Bernstein" for historical watermark and paper computational expertise

Field work

2001.09 – 11 **Iran**, French National Centre for Scientific Research (CNRS) — Mission for Project "Manuscript Heritage"

2000.09 – 11 **Iran**, French National Centre for Research (CNRS) — Mission for the digitization of the manuscript collection of the French Research Institute in Iran

1999.09 – 11 **Iran**, French Institute of Research in Iran (IFRI) — Prospecting countrywide on manuscript collections, epigraphy, and contemporary calligraphers

1999.07 – 08 **Syria**, French Institute for Arabic Studies in Damascus (IFEAD) — Prospecting on manuscript collections, epigraphy, & art history

1999.05 – 06 **Turkey**, Istanbul — Prospecting on manuscript collections, epigraphy, & art history

1998.09 – 1999.02 **Egypt**, French Institute of Oriental Archaeology in Cairo (IFAO) — Study of Mamluk manuscripts and epigraphy

1993.09 – 1994.06 **Syria**, French Institute for Arabic Studies in Damascus (IFEAD) — Training in Middle Eastern Studies; prospecting on manuscript collections, epigraphy, & art history

1991.09– 1992.06 **Egypt**, Department of Arabic Studies in Cairo (DEAC), French Foreign Affairs Ministry — Arabic language training

Grants & Fellowships

2006 – 2009 **European Commission**, eContentPlus project "The Memory of Papers: Bernstein. Image based paper expertise and history" — A partnership between nine European institutions, including national libraries, with 3 000 000 € budget / Role: architect & co-coordinator, https://bernstein.oeaw.ac.at

2003 – 2005	**Aga Khan Fellowship**, Program for Islamic Architecture at the Massachusetts Institute of Technology, USA
2001 – 2003	**French National Center for Scientific Research**, Manuscript Heritage project: Digital cataloging and reproduction of manuscripts collections — A partnership between École Pratique des Hautes Études, UMR 7528 Monde Iranien: Centre National de la Recherche Scientifique, Institut National des Langues et Civilisations Orientales, Université Paris III Sorbonne Nouvelle / Role: founder, http://waqwaq.info/projects/heritage/
1998	**French Ministry of Education & Research**, International Mobility Fellowship

Varia

Reviewer	Document Engineering (Association for Computing Machinery), International Conference on Document Analysis and Recognition (International Association for Pattern Recognition), Pattern Analysis and Applications, Heritage Science, Abstracta Iranica, Forensic Science International, Graphemics in the 21st century
Expert	European Commission, Horizon 2020 Framework Programme for Research and Innovation
Affiliations	Société Asiatique (France), History & Computing (Switzerland)
Licenses	Paragliding, parachuting, scuba diving

Books

2025 Vlad Atanasiu, **Ugraphia: The Pursuit of Perfect Legibility**, Brest: Fluxus Editions, 2024, 186 p., https://doi.org/10.36824/2025-atanasiu.

2014 Vlad Atanasiu, **Expert Bytes—Computer Expertise in Forensic Documents: Players, Needs, Resources, and Pitfalls**, Boca Raton, FL: CRC Press, 2014, 198 p., https://doi.org/10.1201/b15467.

1999 Vlad Atanasiu, 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.

Articles

· Vlad Atanasiu, **Chromatographia Coranica**, in Nuria de Castilla, Michael Friedrich (eds.), François Déroche Festschrift, Rome: Istituto per l'Oriente C.A. Nallino. [forthcoming]

2023 Vlad Atanasiu, Peter Fornaro, **On the utility of Colour in shape analysis: An introduction to Colour science via palaeographical case studies**, Heliyon, 2023, 9 (10): e20698, 25 p., https://doi.org/10.1016/j.heliyon.2023.e20698.

—— Vlad Atanasiu, **Corrections to "The Structural Information Potential and Its Application to Document Triage"**, IEEE Access, 2023, 11: 85711–85715, https://doi.org/10.1109/ACCESS.2023.3299594.

2022 Vlad Atanasiu, **The Structural Information Potential and Its Application to Document Triage**, IEEE Access, 2022, 10: 13103–13138, https://doi.org/10.1109/ACCESS.2021.3133654.

—— Vlad Atanasiu, **Improving the Quality Control and Exploration of Digital Documents Using Visualization and Serendipity**, Journal of Information Architecture, 2022, 6(2): 7–81, https://doi.org/10.55135/1015060901/222.011/2.046.

—— Vlad Atanasiu, **Applications of the Document Towers method of representing document structures; Annex: Dreams, Architecture, and Information Systems: A brief review of the utility of document exploration**, Information Design Journal, 2022, 27(1): 1–47, https://doi.org/10.1075/idj.20026.ata.

—— Wolfgang Eger (author), Heike Bazak, Christiane Sibille (interviewers), Vlad Atanasiu (editor), **Innovating for the Common Good**, in Vlad Atanasiu, Nicolas Chachereau, Enrico Natale, Christiane Sibille (eds), Framing Communication Infrastructures (1950–2020): Discours et imaginaires / Diskurse und Vorstellungen, Revue Histoire et Informatique / Zeitschrift Geschichte und Informatik, vol. 22 (2022), Zürich: Chronos, pp. 123–132.

—— Vlad Atanasiu, Isabelle Marthot-Santaniello, **Personalizing image enhancement for critical tasks: improved legibility of papyri using color processing and visual illusions**, International Journal on Document Analysis and Recognition (IJDAR), 2022 (25): 129–160, https://doi.org/10.1007/s10032-021-00386-0.

2021 Vlad Atanasiu, Rolf Ingold, **Document Towers: A MATLAB software implementing a three-dimensional architectural paradigm for the visual exploration of digital documents and libraries**, SoftwareX, 2021, 14: 100684 , 7 p., https://doi.org/10.1016/j.softx.2021.100684.

2018 Vlad Atanasiu, **Ugraphia. The Utopia of the Perfectly Legible Script**, Extended Abstracts of the conference "Graphemics in the 21st century: From graphemes to knowledge", 14–15 June 2018, Brest, France, pp. 113–140.

2016 Vlad Atanasiu, **Cuckoos among Your Data: A Quality Control Method to Retrieve Mislabeled Writer Identities from Handwriting Datasets**, IS&T International Symposium on Electronic Imaging, Document Recognition and Retrieval XXIII, 15–18 February 2016, San Francisco, CA, paper 056, 16 p,. https://doi.org/10.2352/ISSN.2470-1173.2016.17.DRR-056.

2011 Vlad Atanasiu, **Forensic vs. Computing writing features as seen by Rex, the intuitive document retriever**, First International Workshop on Automated Forensic Handwriting Analysis, 17–18 September 2011, Beijing, China, pp. 16–20.

—— Vlad Atanasiu, Laurence Likforman-Sulem, Nicole Vincent, **Writer Retrieval—Exploration of a Novel Biometric Scenario Using Perceptual Features Derived from Script Orientation**, 11th International Conference on Document Analysis and Recognition, 18–21 September 2011, Beijing, China, pp. 628–632, https://doi.org/10.1109/ICDAR.2011.132.

—— Vlad Atanasiu, **Rex Online**, Gazette du Livre Medieval, 2011 (56–57): 131–135.

—— Table ronde. Applications actuelles de l'informatique à la paléographie: Quelles méthodes pour quelles finalités ? [**Round Table. Paleographical applications of computer science: Which methods and to what aims?**], Gazette du Livre Medieval, 2011 (56–57): 122–123.

—— 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 Vlad Atanasiu, **Using Cartography to reveal Historical Perspectives**, Electronic Cultural Atlas Initiative (ECAI) at Pacific Neighborhood Consortium (PNC) Conference, 4–6 December 2008, Hanoi, Vietnam.

—— Wenger Emanuel, Vlad Atanasiu, **Paper Expertise and Contextual Data Provided by the eContentPlus Project Bernstein**, 29th International Congress of Paper Historians, 27–31 May 2008, Stockholm, pp. 93–101.

2006 Wenger Emanuel, Vlad Atanasiu, eContentPlus Projekt Bernstein. Das Gedächtnis der Papiere [**eContentPlus Project Bernstein. The Memory of Papers**], Proceedings of Conference Electronic Information: the Visual Arts and Beyond, 2006, Berlin, pp. 65–69.

—— Vlad Atanasiu, The President and the Calligrapher: Arabic Calligraphy and Its Political Use [**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, pp. 7–20.
Persian translation (Majid Parvanehpour): **Ra'is jumhur va khushnevis: khushnevisi 'arabi va karbord siyasian**, Faslname-y-e Farhangi-Honary-e Pooshe (Poosheh Quarterly), no. 8, Spring, 2025, Special issue on Calligraphy and Politics, pp. 161–183.

—— Vlad Atanasiu, Les allographes comme mesure biométrique et la synthèse du comportement [**Allographic biometrics and behavior synthesis**], Cahiers GUTenberg, 46–47 (2006): 5–15.

2004 Vlad Atanasiu, **Assessing paper origin and quality through large-scale laid lines density measurements**, Proceedings of 26th Congress of the International Paper Historians Association, 30 August – 6 September 2002, Rome/Verona, pp. 172–184.

—— Vlad Atanasiu, Les réalités subjectives d'un paléographe arabe du X^{e} siècle [**Subjective realities of a 10th century paleographer**], Gazette du Livre médiéval, 2004 (43): 14–22.

2003 Vlad Atanasiu, **Allographic biometrics and behavior synthesis**, TUGboat, 2003 (24.3): 998–1002.

2002 Vlad Atanasiu, 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, 2002 (41): 31–41.

2001 Vlad Atanasiu, 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, 2001 (35): 1–16.

2000 Vlad Atanasiu, 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, 2000 (37): 34–42.

1997 Vlad Atanasiu, 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**], Proceedings of AFEMAM-EURAMES Conference, 4–7 July 1996, Aix-en-Provence, France.

Theses

2023 Vlad Atanasiu, **Human Factors as Constraints and Solutions in Document Processing** — Ph.D. Computer science, University of Fribourg, Switzerland, advisor: Rolf Ingold, https://folia.unifr.ch/unifr/documents/328608.

2003 Vlad Atanasiu, Hypercalligraphie: Le phénomène calligraphique à l'époque du sultanat mamluk (Moyen-Orient, XIII^{e}–XVI^{e} siècle) [**Hypercalligraphy: The calligraphic phenomenon in Mamluk times (Middle East, 13th–16th century)**] — Ph.D. Art History & History, École Pratique des Hautes Études, Paris, France, advisor: François Déroche

1996 Vlad Atanasiu, De la fréquence des letteres et de son influence en calligraphie arabe [**Of Letter Frequencies and Their Influence on Arabic Calligraphy**] — M.A. Paleography, École Pratique des Hautes Études, Paris, France, advisor: François Déroche

1995 Vlad Atanasiu, Familles lexicales dans le "Lisān al-'arab" & Unité du sens des racines [**Lexical Fields in "Lisān al-'arab" & Semantic Unity of <gh**> roots**] — M.A. Linguistics, University of Provence, Aix-en-Provence, advisors: Claude-France Audebert and Pierre Larcher

1993 Vlad Atanasiu, Les sens dans les sons: d'après "Maqāyīs al-lugha", un dictionnaire d'Ibn Fāris [**Meaning and Sound in "Maqāyīs al-lugha", a dictionary by Ibn Fāris (d. 395/1004)**] — B.A. Middle Eastern Studies, University of Provence, Aix-en-Provence, advisor: Claude-France Audebert

Edited books

2025 Enrico Natale, Vlad Atanasiu (eds), **History of Forecasting**, Revue Histoire et Informatique / Zeitschrift Geschichte und Informatik / History and Computing Journal, 2025 (24), Zürich: Chronos.

2022 Vlad Atanasiu, Nicolas Chachereau, Enrico Natale, Christiane Sibille (eds), **Framing Communication Infrastructures (1950–2020): Discourse and Imaginary**, Revue Histoire et Informatique / Zeitschrift Geschichte und Informatik / History and Computing Journal, 2022 (22), Zürich: Chronos.

2019 Nicolas Chachereau, Christiane Sibille, Enrico Natale, Vlad Atanasiu (eds), **Enjeux politiques du web:**

approches historiques / Das Web als politische Herausforderung: historische Perspektiven [**Political Challenges of the Web: Historical Perspectives**], Revue Histoire et Informatique / Zeitschrift Geschichte und Informatik / History and Computing Journal, 2019 (20), Zürich: Chronos, DOI 10.33057/chronos.1466.

Technical Reports

2023 Vlad Atanasiu, **Meaning Is Action: Document Analysis Methods for Accessing Switzerland's Historical Phonebooks**, Final Report, University of Bern, Switzerland, Hasler Project no. 22056.

2022 Vlad Atanasiu, **Improving the matching accuracy of card images and electronic records of the Swiss National Library catalog**, School of Engineering and Architecture, HES·SO//Fribourg, iCoSys, Fribourg, Switzerland

2020 Vlad Atanasiu, **CardOCR Visual Exploration**, in Beat Wolf, Michael Jungo, Andreas Fischer, Analyse "Automatisierte Integration des alten Sachkatalogs in Alma", School of Engineering and Architecture, HES·SO//Fribourg, iCoSys, Fribourg, Switzerland

2018 Vlad Atanasiu, **Structural Information Potential: Theory, Measurement, Representation, Applications**, School of Engineering and Architecture, HES·SO//Fribourg, Fribourg, Switzerland

2016 Vlad Atanasiu, **UHU: An interactive web-based software to visualize the graph edit distance**, Department of Informatics, University of Fribourg.

2015 Vlad Atanasiu, **Automation of EPUB Production: 1. How can InDesign help the tagging of PDFs?, 2. The Visualization of Document Structures**, Document Image and Video Analysis Group (DIVA), Department of Informatics, University of Fribourg / Sugarcube Sarl.

2011 Vlad Atanasiu, **Computational Handwriting Analysis**, Télécom ParisTech, Paris.

2005 Vlad Atanasiu, **Spatial proprieties of written information: measurements, encoding, applications**, Balkan Commission, Austrian Academy of Sciences, Vienna, Austria.

1992 Vlad Atanasiu, **Ghagars of the Nile Delta. An Ethnographic and Linguistic Study** (private commission)

Talks

2020 **Contextual Versus Generic Technologies: Lessons from selecting images among a large number of papyri enhancements**, IS&T DigiTips, 15 December 2020, online conference.

—— Vlad Atanasiu, Peter Fornaro, **On the Utility of Color for Shape Analysis**, Neo-Paleography conference, University of Basel, 27–29 January 2020, Basel, Switzerland.

2019 **Script Styles Panoramas by Computational Synthesis**, 29th International Congress of Papyrology, 28 July – 3 August, Lecce, Italy.

—— **Computational Graphonomics (d-scribes Project)**, Computerizing Handwritings: Current Approaches on Historical Documents, University of Basel, 27 June 2019, Basel, Switzerland.

—— **Digital Paleography as Odyseey**, Center for the Study of Manuscript Cultures, University of Hamburg, 23 Mai 2019, Hamburg, Germany.

—— Isabelle Marthot-Santaniello, Vlad Atanasiu, **The Digital Paleography of Greek and Coptic Papyri**, Digital Humanities Exchange Conference DHX2019, University of Basel, 21–22 February 2019, Basel, Switzerland.

2017 **See-thorugh Books: Visual Exploration of Vesalius' "Fabrica" (1543)**, Panel Hackathons als Zukunftslabor für die digitale Nachhaltigkeit, Conference Digital Humanities im deutschsprachigen Raum, 13–18 February 2018, Berne, Switzerland.

2015 **Document and library visualization**, Workshop on The state of the art in image recognition, Digital Cultural Heritage Forum, Association of European Research Libraries (Liber) 44th Conference, 24–26 June 2015, London, UK.

2008 **Reflets d'encre: une fantaisie typographique offerte par un paléographe**, Colloque international d'épigrqphie islamique, Hommage à Solange Ory, Maison méditerranéenne des sciences de l'homme (MMSH), 28–29 November 2008, Aix-en-Provence, France.

2008 **Visionary Scientists: What Scientific Visualization can learn form Graphic Arts**, Aesthetics and Science, Symposium on the Occasion of the Solemn Session of the Austrian Academy of Sciences, 13 Mai 2008, Vienna, Austria.

2006 **Bernstein: Collaborative systems for paper expertise and history**, The Islamic Manuscript II: A Conference to Establish The Islamic Manuscript Association (TIMA), Cambridge University, 7–9 August 2006, Cambridge, UK.

2004 **Handwriting of the Dead: Advances in Script Identification and Synthesis**, Aga Khan Program for Islamic Architecture at the Massachusetts Institute of Technology, 10 May 2005, Cambridge, MA, USA.

2002 **Visible i'ajaz: Three graphic particularities in Qur'an copies**, International Conference on Manuscripts

of the Qur'an, 26–28 September 2002, Bologna, Italy.

2002 **Type with Style!**, Symposium on The history of printing and publishing in the languages and countries of the Middle East, First Congress of Middle Eastern Studies, 9–12 September 2002, Mainz, Germany.

—— **The Kabikadj database for manuscripts**, European Association of Middle East Librarians (MELCOM), 27–29 May 2002, Paris, France.

—— **The Manuscript Heritage Project for Digital Manuscripts**, French National Centre for Research (CNRS), 23 May 2002, Villejuif, France.

2000 **Statistics, Language, & Calligraphy** (in Persian), Dramatic Arts Center of Iran, Tehran, Iran

—— Structures linguistiques et structures graphiques : Problèmes et solutions de la calligraphie du Coran en écritures persanne nasta'liq [**Linguistic and graphical structures: Problems and solutions to writing the Qur'an in the Persian nasta'liq style**], French Institute of Research in Iran, 23 December 2000, Tehran, Iran.

—— **Linguistic aspects of calligraphy**, 36th International Congress of Asian and North African Studies (ICANAS), 27 August – 2 September 2000, Montreal, Canada.

—— **Cultural ramifications of letter frequencies in Arabic**, New York University Florence, Florence, Italy.

1998 **Sex, Calligraphy and Politics**, Mamluk Studies Conference / Conference of the Middle Eastern Studies Association, 3–6 December 1998, Chicago, IL, USA.

1997 Donne-moi ton regard, je t'offrirais l'immortalité – Apologie pour la sociologie du regard [**Give me your gaze, I will offer you Immortality: Apologue for a sociology of the gaze**], inaugural lecture, Société Asiatique, Palais de l'Institut de France, Paris, France.

—— **Give me your gaze, I will offer you Immortality: Apologue for a sociology of the gaze**, 35th International Congress of Asian and North African Studies (ICANAS), Körösi Csoma Society & Eötvös Loránd University, 9–10 July 1997, Budapest, Hungary.

1995 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**], Symposium on Atour de la Pentecôte : universalité du langage et pluralité des langues et cultures, 2 June 1995, Aix-en-Provence, France.

Web publications

URL http://waqwaq.info

2011 **Avatars in Real Life: Placename homonymy in Iran**

2010 **Inimitable handwriting. Graphical specificities of copying the Qur'an**

2009 **7385 Swabian bulls and 2 Viennese mermaids: Interpreting the Bernstein cartography of papers and watermarks**

—— **The Score of Death. Plague Epidemics in Europe 1347–1600**

2004 **A Japanese Gaze. Using space to represent time and meaning in Japanese animation**

1999 **Devil in the Gaze. Depicting social non-conformism in Harīrī's Maqāmāt**

Reviews

2018 **Computer Networks Histories: Illustrated Review**, Lugano, 14–15 December 2017, 28 p., conference review, infoclio.ch.

2015 **Data and History: Poetry & Cartoons Review**, Symposium, Berne, 16 September 2015, 20 p., conference review, infoclio.ch.

—— **Document Engineering (DocEng)**, Lausanne, 8–11 September 2015, conference review, infoclio.ch.

2010 Yuka Kadoi, **Islamic Chinoiserie**, Edinburgh, Edinburgh University Press, 2010 / Abstracta Iranica, 32–3 (2009–10): 147, book review.

2003 David J. Roxburgh, **Prefacing the Image: The Writing Art History in Sixteenth-Century Iran**, Leiden, E.J. Brill, 2000 / Abstracta Iranica, 24 (2001): 82–3, book review.

—— W. M. Thackston, **Album Prefaces and Other Documents on the History of Calligraphers and Painters**, Leiden, E.J. Brill, 2000 / Abstracta Iranica, 24 (2001): 84–4, book review.

Unpublished work

2000 **Feathers of Angels: Homoeroticism and calligraphy in Renaissance Persia**

1998 Les Lampes de Déméter: Le symbolisme sacré des lampes à huile en terre cuite dans les bassin méditerranéen [**Demeter's lamps: Sacred symbolism of terracotta oil lamps around the Mediterranean**]

Software

Ongoing	**Matlab code: image processing, statistics, handwriting analysis**, Matlab File Exchange, MathWorks, https://ch.mathworks.com/matlabcentral/fileexchange/?q=atanasiu.
2024	**Phonebooks: Swiss historical phonebooks**, web application, PTT-Archiv, Köniz, Switzerland, https://historic.localsearch.ch/.
2021	**Hierax: Legibility enhancement of papyri**, desktop software, University of Basel, https://hierax.
2011	**Rex: Retrieving documents by describing their handwriting**, desktop software & web application, Télécom ParisTech, https://glyph.telecom-paristech.fr/.
2011	**Irancarto: Atlas of Iran and the Iranian World**, web application, CNRS, Paris, http://www.irancarto.cnrs.fr/.
2009	**Bernstein: Image-based paper expertise and history**, web & deskop applications (image processing & GIS), Austrian Academy of Sciences, https://bernstein.oeaw.ac.at/.
2002	**AD751: Paper laid lines density measurement**, desktop software, CNRS, Paris, https://waqwaq.info/software/ad751/.

Datasets

2001	**Manuscript Heritage. Iranian Manuscript Series: Digital cataloging & reproduction of manuscript collections**, http://waqwaq.info/projects/heritage/

Exhibitions

2021	**Vote now! On the right to have a say**, Swiss National Library — Contributed quantitative data and concepts for information representation. https://www.nb.admin.ch/en/vote

Fiction (Selection)

URL	https://waqwaq.info/index.html#fiction
Ongoing	**Impossible Books**, The New Yorker (submitted)
Ongoing	**Travel to Waqwaq** (photographical geo-fiction)
2003 – 2005	**Fresh Sushi News** (life at MIT)
1998	Le Moustique [**The fly**], Le Lien, Revue de l'Association Démocratique des Français à l'Étranger, 1998 (November): 14-15
——	La chaise de Richelieu [**Richelieu's chair**] [the cat of the National Library of France]
1995	Le talisman de Si Sadeq [**Si Sadeq's Talisman**] [fictionalizing documents of the Archives nationales d'outre-mer, Aix-en-Provence]
1994	Virgule d'Orient ou comment fut construit Babel [**Oriental commas. Or how Babel was build**], in Anne Zali, Annie Berthier (eds), Les Écritures, Paris: Bibliothèque Nationale, 1997, p. 72.
1990	Le divan bleu [**Blue Divan**] (novel, bound in rabbit fur)

Visual arts (Selection)

URL	https://waqwaq.info/index.html#art
Ongoing	**Photography**, Through my Eyes, A photographic journey
2024	**Journal cover template layout design**, History and Computing, Chronos, Zürich, https://www.chronos-verlag.ch/reihen/2274
2023	**Logo**, Digital History Network Switzerland, https://www.digitalhistorynetwork.ch/en/home
2021	**Logo & Merchandising**, Digital Criticism, Unconference October 21–22, 2021, Bern, University of Bern, https://critique-digitale.ch/
2020	**Logo & post cards**, Corona Memory website, infoclio.ch & University of Bern, https://corona-memory.ch
2019 – 2021	**Logo & Program booklet layout**, ICDAR 2021 Conference, Lausanne, https://iapr.org/archives/icdar2021/index.html
2018	**Logo**, History & Computing Association, Bern, http://www.ahc-ch.ch
2018	**Font**, Metamorphosis
2015	**Layout**, **Svizzera Open Access. Guida alle risorse online per le scienze storiche e sociali**, infoclio.ch, Berne
2013	**Cover design**, Frank Peter, Sarah Dornhof, Elena Arigita, eds., Islam and the Politics of Culture in Europe: Memory, Aesthetics, Art, transcript Verlag, Bielefeld

2009 **Sonification**, Conversations in Deep Space, Les Grands Boulevards, The Alphabets, https://waqwaq.info/art/synesthesia/
2008 **Font**, Sol, hommage to Solange Ory
—— **Logo**, Historians of Islamic Art Association
2006 **Layout**, Roger Delbarre, Communication et violence symbolique: Une autre approche de la société est-allemande, L'Harmattan, Paris
2003 **Impossible books**, objects, private collection Cristina Pallini, Italy/USA
2000 **Graphics**, "Art Slash Life", Art/Life, 2000 (5)
1997 **Fonts** for the transliteration of Oriental languages (Oxford University Press, American University in Cairo, and Laboratory of Egyptology, École Pratique des Hautes Études, Paris)
1996 **Web site**, Delia Dumitrașcu, painter

Calligraphy

1994 Student of calligrapher Adnān Sanaqnaqī in **Damascus**, Syria (nasta'līq calligraphic style)
1993 Follows the teaching of master Hassan Celebi in **Istanbul**, Turkey (ruq'a calligraphic style)
1992 – 1993 Noviciate with Prof. Solange Ory at the University of Provence, **Aix-en-Provence**, France