

Christopher W. Forstall

Department of Computer Science and Engineering
Fitzpatrick Hall
University of Notre Dame
Notre Dame IN 46556

(574) 298-3889
christopher.forstall@nd.edu
www.cwforstall.net

I'm a digital classicist with interests in Ancient Latin and Greek poetry, computational stylometry, cognitive science, and oral-formulaic theory. I use Digital Humanities methods to study the ways in which literary texts and their audiences respond to one another through patterns of sound, meter, and vocabulary. I have an interdisciplinary background in both science and literature, with extensive experience developing web-based infrastructure for computational projects in the humanities.

INTERESTS

Digital Humanities, Greek and Latin Epic, Intertextuality, Oral-Formulaic Theory

EDUCATION

- 2014 Ph.D, Classics, University at Buffalo
Thesis: "*De Homeri ingenio*: aspects of oral-formulaic composition in the *Iliad*.
Supervisor: Roger D. Woodard
- 2009 M.A., Classics, University at Buffalo
Project: "An application of computer-based authorship analysis techniques to the Homeric epos."
- 2006 M.S., Earth and Environmental Sciences, Lehigh University
Thesis: "Correlating hemispherical photography with riparian canopy transmittance and UV-B exposure of low-order streams"
- 2004 B.A., Classics / Earth and Environmental Sciences, Lehigh University

PROFESSIONAL APPOINTMENTS

- 2016-present Post-doctoral Researcher, University of Notre Dame
2014-2016 Post-doctoral Researcher, University of Geneva, Switzerland

BOOKS

- forthcoming Forstall, C. W. and W. J Scheirer. *Quantitative Intertextuality*. Springer-Verlag.

BOOK CHAPTERS

- 2017 Coffee, N. and C. W. Forstall. (2017) "Claudian's engagement with Lucan in his historical and mythological hexameters," in V. Berlincourt, L. Galli-Milić, D. Nelis, eds., *Lucan and Claudian: Context and Intertext*. Winter Verlag. Pp. 255-84.

ARTICLES

- 2017 Rocha, A., W. J. Scheirer, C. W. Forstall, T. Cavalcante, A. R. B. Carvalho, and E. Stamatatos (2017) "Authorship Attribution for Social Media Forensics." *IEEE Transactions on Information Forensics and Security* 12(1):5–33.
- 2016 Scheirer, W. J., C. W. Forstall, and N. Coffee (2016) "The Sense of a Connection: Automatic Tracing of Intertextuality by Meaning." *Digital Scholarship in the Humanities* 31(1): 204-217
- 2015 Forstall, C. W., N. Coffee, T. Buck, K. Roache, and S. Jacobson (2015) "Modeling the Scholars: Detecting Intertextuality Through Enhanced Word-Level n-gram Matching." *Digital Scholarship in the Humanities* 30(4): 503-515.
- 2013 Coffee, N., J.-P. Koenig, S. Poornima, C. W. Forstall, R. Ossewaarde, and S. Jacobson (2013) "The Tesserae Project: Intertextual Analysis of Latin Poetry." *Literary and Linguistic Computing* 28(2): 221-228.
- 2012 Coffee, N., J.-P. Koenig, S. Poornima, C. W. Forstall, R. Ossewaarde, and S. Jacobson (2012) "Intertextuality in the Digital Age." *Transactions of the American Philological Association* 142.2: 383-422.
- 2011 Forstall, C. W., S. Jacobson and W. J. Scheirer (2011) "Evidence of Intertextuality: Investigating Paul the Deacon's *Angustae Vitae*." *Literary and Linguistic Computing* 26(3): 285-296.
- 2010 Forstall, C. W. and W. J. Scheirer (2010) "Features From Frequency: Authorship and Stylistic Analysis Using Repetitive Sound." *Proceedings of the Chicago Colloquium on Digital Humanities and Computer Science* 1(2).

CONFERENCE PAPERS

- 2016 Forstall, C. W. and W. J. Scheirer. "'The Lannisters Send their Regards': Intertextual Tools and Theory in the Age of Fandom." *Chicago Colloquium on Digital Humanities and Computer Science*, University of Illinois at Chicago, November 11, 2016.
- 2016 Forstall, C. W., L. Galli Milić and D. Nelis. "Approaches to Thematic Classification for Latin Epic." *Digital Humanities 2016*, Krakow, Poland, July 11–16, 2016.
- 2015 Forstall, C. W. and L. Galli Milić. "Thematic Features for Intertextual Analysis." *Digital Classicist Berlin Seminar Series*, Berlin, Germany, October 13, 2015.
- 2014 Gawley, J., C. W. Forstall and K. Clark. "Automating the Search for Cross-Language Text Reuse." *Digital Humanities 2014*, Lausanne, Switzerland, July 9–11, 2014.
- 2013 Forstall, C. W., J. Gawley, K. Clark, and A. Miu. "Two Methods for Discovering Cross-Language Text Reuse." *Chicago Colloquium on Digital Humanities and Computer Science*, DePaul University, Chicago, IL, December 5–7, 2013.
- 2009 Forstall, C. W. and W. J. Scheirer. "Features From Frequency: Authorship and Stylistic Analysis Using Repetitive Sound." *2009 Chicago Colloquium on Digital Humanities and Computer Science*. Illinois Institute of Technology, Chicago, IL, November 2009.

- 2004 Hargreaves B. R., C. W. Forstall, L. M. Nichols, D. P. Morris, F. J. Pazzaglia, C. E. Williamson, and R. N. Weisman. "Lake Model for Ultraviolet Attenuation Adapted to Streams." *29th Congress of the International Association of Theoretical and Applied Limnology*. Lathi, Finland, August 8-14, 2004.

POSTERS

- 2015 Forstall, C. W., L. Galli Milić, and D. Nelis. "Beyond Verbal Identity: Contextual Features for Intertext Discovery." *Humanités Numériques et Antiquité*, Grenoble, France, September 2–4, 2015.
- 2014 Scheirer, W. J. and C. Forstall. "Euterpe's Hidden Song: Patterns in Elegy." *Digital Humanities 2014*, Lausanne, Switzerland, July 9–11, 2014.
- 2013 Scheirer, W. J., C. Forstall, N. Coffee, J. Corso, D. Johnson, and B. Parks. "Modeling the Interpretation of Literary Allusion with Machine Learning Techniques." *Digital Humanities 2013*, University of Nebraska-Lincoln, July 16–19, 2013.
- 2013 Coffee, N., C. W. Forstall, and J. Gawley. "What is Allusion? A Digital Approach." *Word, Space, Time: Digital Perspectives on the Classical World*, University at Buffalo, April 5–6, 2013.
- 2012 Forstall, C. and W. J. Scheirer. "Revealing Hidden Patterns in the Meter of Homer's *Iliad*." Poster. *2012 Chicago Colloquium on Digital Humanities and Computer Science*, University of Chicago, November 17–19, 2012.
- 2012 Gawley, J., C. W. Forstall, and N. Coffee. "Evaluating the Literary Significance of Text Reuse in Latin Poetry." *2012 Chicago Colloquium on Digital Humanities and Computer Science*, University of Chicago, November 17–19, 2012.
- 2011 Forstall, C. W. and W. J. Scheirer. "Visualizing Sound as Functional n-grams in Homeric Greek Poetry." *Digital Humanities 2011*, Stanford University, Palo Alto, CA, June 19–22, 2011.
- 2011 Coffee, N., J.-P. Koenig, S. Poornima, C. W. Forstall, R. Ossewaarde, and S. Jacobson. "The Tesserae Project: Intertextual Analysis of Latin Poetry." *Digital Humanities 2011*, Stanford University, Palo Alto, CA, June 19–21, 2011.
- 2010 Forstall, C. W. and W. J. Scheirer. "A Statistical Stylistic Study of Latin Elegiac Couplets." *2010 Chicago Colloquium on Digital Humanities and Computer Science*, Northwestern University, Evanston, IL, November 21–22, 2010.
- 2010 Forstall, C. W., S. L. Jacobson and W. J. Scheirer. "Evidence of Intertextuality: Investigating Paul the Deacon's *Angustae Vitae*." *Digital Humanities 2010*, King's College London, UK, July 7–11, 2010.
- 2005 Forstall, C. W., S. Haight and B. R. Hargreaves. "Using ASTER Data to Quantify Riparian Canopy Area for a Range of Stream Orders in Eastern Pennsylvania, USA." *2005 GSA NE Regional Meeting*, Saratoga Springs, NY, March 2005.
- 2005 Haight, S., C. W. Forstall and B. R. Hargreaves. "Ground and Satellite Estimates of the Penetration of Ultraviolet and Visible Radiation Through Forest Canopy in Eastern Pennsylvania, USA." *2005 GSA NE Regional Meeting*, Saratoga Springs, NY, March 2005.
- 2004 Forstall, C. W., B. R. Hargreaves and L. M. Nichols. "Quantitative Modeling of DOC Transport in the Lehigh River Watershed." *2004 Sigma Xi Regional Symposium*, St. Joseph's University, Philadelphia, PA, April 2004.

- 2004 Nichols, L. M., C. W. Forstall and B. R. Hargreaves. "Qualitative Properties of CDOM in the Lehigh River Watershed." 2004 Sigma Xi Regional Symposium, St. Joseph's University, Philadelphia, PA, April 2004.

WORKSHOPS

- 2015 "TESSERAEE: Intertextualité et informatique." With L. Galli Milić and D. Nelis. *Humanités Numériques et Antiquité*, Grenoble, France, September 2, 2015.
- 2014 "Digital Textual Analysis with R for Humanists," With J. Gawley. University at Buffalo, April 17, 2014.
- 2012 "Revealing intertextuality with Tesserae." *Lucaïn et Claudien face à face: une poésie politique entre épopée, histoire et panégyrique*, Fondation Hardt, Vandœuvres, Switzerland, November 8–10, 2012.

RESEARCH EXPERIENCE

- 2011–2014 Research Assistant, Classics, University at Buffalo
- 2004–2005 Research Assistant, Earth and Environmental Sciences, Lehigh University

TEACHING EXPERIENCE

University of Notre Dame

- 2017 Elements of Computing II

University of Geneva

- 2015 Travestissement et transgénéricité: l'Achilléide de Stace (co-instructor)

University at Buffalo

- 2010 Indo-European Myth and Religion
- 2010 Cicero *Pro Caelio*
- 2008–2009 Introductory Latin 1–2
- 2006–2008 World Civilizations (teaching assistant)

Lehigh University

- 2006 Ecology (teaching assistant)
- 2006 Geographic Information Systems (teaching assistant)
- 2004–2006 Intro Environmental and Organismal Biology (teaching assistant)

INVITED TALKS

- 2017 Nelis, D. C. W. Forstall and L. Galli Milić. “Exploring New Methods: Quantitative Approaches to Epic Intertextuality.” *Exploring the Boundaries of Narrative Structures in Epic Poetry*, Fondation Hardt, Vandœuvres, Switzerland, February 4, 2017.
- 2016 Forstall, C. W. and W.J. Scheirer. “Quantitative Intertextuality for Texts Ancient and Modern.” College of the Holy Cross, Worcester MA, October 17, 2016.
- 2014 Forstall, C. W. “Tesserae: Digital Humanities Perspectives on Intertextual Reading.” Lehigh University, Bethlehem PA, April 16, 2014.

MEETINGS ORGANIZED

- 2016 *Généalogies et intertextualités numériques: l’atelier du Bodmer Lab #1*. With R. Suciú, A. Biscéré and T. Rolland. University of Geneva, Switzerland, January 14–15, 2016.
- 2015 *Intertextuality in Flavian Epic Poetry*. With L. Galli Milić, N. Coffee, and D. Nelis. Fondation Hardt, Vandœuvres, Switzerland, May 28–30, 2015.

GRANTS

- 2014–2016 “Intertextuality in Flavian Epic Poetry,” Co-applicant with L. Galli Milić and D. Nelis. Swiss National Science Foundation #160658

PROFESSIONAL DEVELOPMENT

- 2016 *Hackathon: “Don’t leave your data problems at home!”*, Electronic Text Reuse Acquisition Project, Göttingen Centre for Digital Humanities, Göttingen, Germany, July 27-31, 2016.
- 2013 *Conventiculum Buffaloniense*, spoken Latin workshop, University at Buffalo, June 26-28, 2013.
- 2012 *Conventiculum Buffaloniense*, spoken Latin workshop, University at Buffalo, June 27-29, 2012.
- 2011 *THATCamp GTA*, Ryerson University, Canada, October 21–22, 2011.

PROFESSIONAL SERVICE

- 2017, 2016 Referee, *IEEE Transactions on Information Forensics & Security*
- 2016 Referee, *English Text Construction*
- 2016 Referee, *Society for Classical Studies Annual Meeting*
- 2012, 2010 Referee, *Literary and Linguistic Computing*

COMPUTING EXPERIENCE

Scripting: Perl (15 years), R (10+ years), Python, JavaScript
Productivity: MS Office, Apple iWork, LibreOffice

Web development: HTML5, CSS, Django, Tornado, Perl CGI

Database: MySQL

Text-processing: XML and TEI-XML, HTML, LaTeX

Data analysis: PCA, SVMs, LDA, clustering

Version control: Git, Subversion

Virtualization: VirtualBox, Vagrant

System administration: Debian, OpenBSD, Ubuntu

Geospatial: ESRI ArcGIS, GRASS GIS, ENVI

LANGUAGES

Speaking/Writing: English, French (conversational)

Reading: Latin, Ancient Greek, German (with dictionary)