

## Ethan Gruber

Web Applications Developer, University of Virginia Library  
3D Modeler, Pompeii Forum Project, University of Virginia  
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## Employment

Digital Production Specialist/Web Applications Developer, University of Virginia Library, 2006-present  
Specialist in library digital production best practices in the fields of text encoding, imaging, and audiovisual resources. Responsible for the migration of legacy projects into new standards and software environments.  
Developer of library and faculty-based web applications; electronic metadata specialist in Text Encoding Initiative (TEI) and Encoded Archival Description (EAD).

Contract Programmer, Kittredge Numismatic Foundation, 2009  
Adapted Numishare application for searching, displaying, and managing data to the Kittredge Collection of European coins: <http://www.kittredgecollection.org>

Researcher, 3D modeler, Web Developer, Institute for Advanced Technology in the Humanities, 2007-2008  
Roman topography researcher and 3d modeler for Rome Reborn Google Earth/SIGGRAPH 2008 project.  
Developer of prototype framework for the display of TEI-encoded Leonardo da Vinci texts based strongly on XSLT and ajax in Cocoon.

Contract XSLT Programmer, Northwest Digital Archives, 2007  
Wrote EAD XSLT stylesheets for the Northwest Digital Archives, a consortium of university libraries and historical societies, to better display their collection of electronic finding aids.

Temp, Claude Moore Health Sciences Library Historical Collections at the University of Virginia, 2006  
Responsible for transcription and TEI markup of special collections books and *Medical Alumni* newsletter.

Intern, John D. Rockefeller, Jr. Library, Colonial Williamsburg Foundation, 2005-2006  
Transcription and encoding in TEI research reports from Colonial Williamsburg's archaeologists and historians.

## Education

B.A., History The Pennsylvania State University, 2006

## Research Interests/Expertise

The application of technology to improving perception and understanding of materials in the field of classical archaeology. Specialization in 3D visualization of cultural heritage sites and the recontextualization of artwork within 3D environments through accurate lighting simulation. Specialization in the archiving and dissemination of cultural heritage data electronically. The use of XForms W3C standard for creating next-generation web forms that remove technical barriers that prevent subject specialists from creating robust metadata.

## Skills

### Web Development/Programming

HTML/XHTML, XML/XSLT (including XSL-FO and XForms), Javascript (ajax/jQuery), CSS, PHP (Zend Framework), MySQL, Ruby on Rails, C++, Microsoft Visual Basic, shell scripting, Perl.

### Metadata Standards

TEI, EAD (expert); METS, MODS, MARC, RDF, VRA Core, CDWA (knowledgeable)

### **Server Administration and Applications**

Linux server administration (LAMP). Apache Tomcat, Cocoon, and Solr. Rails, Zend Framework. Adore djabatoka  
JPEG-2000 server, Orbeon XForms, eXist, XTF, Omeka, general CMS knowledge

### **3D Modeling**

Autodesk Maya, MultiGen Creator, Google Sketchup, mentalray rendering

### **Graphics/Audiovisual resources**

Adobe Photoshop, GIMP (texture editing and creation), knowledgeable of audio and video codecs, FinalCut Pro, Cinelerra, Audacity and similar video and audio editing suites. Experience in JPEG-2000 image encoding.

### **GIS**

ESRI ArcGIS suite, Mapserver

## **Selected Projects**

### **3D**

Rome Reborn (<http://www.romereborn.virginia.edu/>), Roman topography researcher and 3d modeler

House of the Faun at Pompeii, 3d modeler

House of the Drinking Contest at Seleucia Pieria, 3d modeler

Pompeii Forum Project, 3d modeler

### **Web**

University of Virginia Numismatic Collection (<http://coins.lib.virginia.edu>), project manager/developer

Kittredge Collection (<http://www.kittredgecollection.org>), project manager/developer

Numishare: Open source framework for the display of coins described in EAD

(<http://sourceforge.net/projects/numishare>), project manager/developer

EADitor: XForms application for creating/editing EAD (<http://code.google.com/p/eaditor/>), project manager/developer

Omeka plugins (<http://www.scholarslab.org/projects/omeka-plugins/>), developer

Artists Books Online (<http://www.artistsbooksonline.org/>), developer

The Collective Biographies of Women (<http://womensbios.lib.virginia.edu/>), developer

Latvian Dainas (<http://latviandainas.lib.virginia.edu/>), developer

The Salisbury Project (<http://salisbury.art.virginia.edu/>), developer

## **Presentations**

“Computer Modeling Sheds New Light on the MFA's Antioch Mosaic.” 28 April 2011: hosted by the Laurel Society of the Museum of Fine Arts, Boston.

“Panel Session: Streetwise in Pompeii: via dell'Abbondanza and via del Foro.” Paper to be presented at The Classical Association of the Middle West and South, Southern Section held in Richmond, Virginia 28 October 2010.

“The (Roman) Art of (Computer) Science: 3D Computer Technology and a Recreation of the 'House of the Drinking Contest' at Antioch.” 10 October 2010: Princeton University Art Museum.

“EADitor: XForms for EAD.” 11 August 2010: EAD Roundtable at the Society of American Archivists annual meeting held in Washington, D.C. 9-13 August 2010.

“EADitor: XForms for EAD.” 30 April 2010: Mid-Atlantic Regional Archives Conference held in Wilmington, Delaware 29 April-1 May 2010.

“Illuminating Historical Architecture: The House of the Drinking Contest at Antioch.” Presented at Antioch Studies Day at Dumbarton Oaks Collection, Washington, D.C., 16 April 2010.

“Illuminating Historical Architecture: The House of the Drinking Contest at Antioch.” Paper presented at Computer Applications and Quantitative Methods in Archaeology 2010 held in Granada, Spain 6-9 April, 2010.

“Modeling Hypotheses in Pompeian Archaeology: The House of the Faun.” Paper presented at Computer Applications and Quantitative Methods in Archaeology 2010 held in Granada, Spain 6-9 April, 2010.

“Illuminating Historical Architecture: The House of the Drinking Content at Antioch.” 25 March 2010: University of Virginia Library Scholars' Lab lecture series

“Virtual Reconstruction.” 4 March 2010: Guest lecture in Anthropology course on Digital Archaeology.

“Illuminating Historical Architecture: A Look Inside the House of the Drinking Contest.” 8 October 2009: Virginia Museum of Fine Arts Friends of Ancient Art lecture series.

“Encoded Archival Description for Numismatic Collections.” Paper presented at Computer Applications and Quantitative Methods in Archaeology 2009 held in Williamsburg, Virginia 23-27 March, 2009.

“The University of Virginia Art Museum Numismatic Collection.” 19 September 2008: University of Virginia Library Scholars' Lab Fall lecture series.

“Digitization: Advancement in the Study and Preservation of Coins .” Paper presented at Archiving 2008 held in Bern, Switzerland 24-27 June, 2008.

## **Publications**

Dobbins, John and Ethan Gruber. "Modeling Hypotheses in Pompeian Archaeology: The House of the Faun." In the proceedings for Computer Applications and Quantitative Methods in Archaeology 2010 held in Granada, Spain 6-9 April, 2010. In review.

Gruber, Ethan and John Dobbins. "Illuminating Historical Architecture: The House of the Drinking Contest at Antioch." In the proceedings for Computer Applications and Quantitative Methods in Archaeology 2010 held in Granada, Spain 6-9 April, 2010. In review.

Fitzpatrick, Chris, Ethan Gruber, Bill Parod, and Scott Prater. “XForms for Libraries: An Introduction.” *Code4Lib Journal* 11: September 2010. <http://journal.code4lib.org/articles/3916>

Gruber, Ethan. "Encoded Archival Description for Numismatic Collections." In *CAA 2009 Held in Williamsburg, Virginia 22-26 March 2009*. Williamsburg, VA: Computer Applications and Quantitative Methods in Archaeology, 2009.

Gruber, Ethan. "Digitization: Advancement in the Study and Preservation of Coins." In *Archiving 2008: Final Program and Proceedings Held in Bern, Switzerland 24-27 June 2008*, 146-149. Springfield, VA: Society for Imaging Science & Technology, 2008.

## **Awards**

University of Virginia Library Research and Development Grant to attend CAA, 2010

University of Virginia Library Research and Development Grant to attend CAA, 2009

University of Virginia Library Innovation Project Grant for U.Va.Numismatic Project , 2007

## **Memberships**

Computer Applications and Quantitative Methods in Archaeology, 2009-