

KEVIN ROBERT DYKE

krdyke@gmail.com · 2012 W Arrowhead Dr, Stillwater, OK 74074 · 612.323.1524

www.kevinrdyke.com · <http://www.linkedin.com/pub/kevin-dyke/38/48b/a84> · <https://github.com/krdyke>

EDUCATION

University of Minnesota-Twin Cities, Minneapolis, Minnesota

Master of Arts in Geography, graduate minor in Geographic Information Science (3.9 GPA)

Truman State University, Kirksville, Missouri

Bachelor of Arts in History, minors in Geography and English (3.92 GPA)

EXPERIENCE

Spatial Data Librarian

Edmon Low Library, Oklahoma State University

August 2016 – Present

Spatial Data Analyst/Curator

John R. Borchert Map Library, University of Minnesota

February 2014 – July 2016

Selected Projects

Big Ten Academic Alliance Geospatial Data Project <https://www.btaa.org/projects/library/geoportal>

I was the project manager of a grant funded, collaborative project to provide discoverability, facilitate access, and connect scholars to geospatial data resources across nine CIC institutions in eight states.

Data Repository for the University of Minnesota (DRUM) <https://z.umn.edu/drum>

I was part of the team that developed the service model and created web page content for the University's Data Repository, and served as a data curator, working with researchers to document and organize their submissions prior to their publication in the repository.

Spatial Data @ University of Minnesota <https://lib.umn.edu/geodata>

I wrote custom code (JavaScript and Java) and handle metadata harvest/transformation/enhancement (Python, XSLT, and XML) for the Libraries' spatial data discovery platform.

The Mapping of Joy and Pain <http://borchert.github.io/joy-pain/>

We worked with a local artist and faculty member to create a digital version of what was originally a public, participatory art project. I supervised research assistants doing the web design and programming and also contributed programming.

Faculty, Master of Geographic Information Science Program

University of Minnesota

September 2015 – July 2016

I taught classes on web mapping, with an emphasis on using open source technologies.

Web/GIS Applications Programmer

Flat Rock Geographics

May 2013 – February 2014

Selected Projects

MapFeeder

Web-based asset management application. I was responsible for front-end development utilizing OpenLayers, JQuery, and other JavaScript. Back-end built on Code Igniter PHP MVC framework and PostgreSQL database making use of PostGIS extension. The focus of my work was on improving user interaction with data and relationship between data as seen on a map and in a table.

QONQR

Developed prototype for new map-based interface for geo-social mobile game. Transformed initial dataset of nearly three million points into nearly three million Voronoi polygons using QGIS, styled using CartoCSS, dynamic tiles generated and served using CartoDB.

KEVIN ROBERT DYKE

krdyke@gmail.com · 2012 W Arrowhead Dr, Stillwater, OK 74074 · 612.323.1524

www.kevinrdyke.com · <http://www.linkedin.com/pub/kevin-dyke/38/48b/a84> · <https://github.com/krdyke>

GIS Programmer

May 2012 - October 2013

John R. Borchert Map Library, University of Minnesota

Minnesota Historical Aerial Photographs Online (MHAPO) <https://www.lib.umn.edu/apps/mhapo>

Redesigned an existing application facilitating the discovery and download of over 100,000 aerial photographs of the state of Minnesota. Utilized ArcGIS for Desktop software for initial data processing, ArcGIS for Server for the publication of related map services. Combined a number of techniques using the ArcGIS JavaScript API so as to present the relevant data as seamlessly as possible.

Campus History Map <https://www.lib.umn.edu/apps/campushistory/>

Developed an interactive map exploring the history of the University's Twin Cities campus, employing multiple aspects of the ArcGIS software suite. Tasks involved included, among others, publishing and administering services created using ArcGIS Server, incorporating those services into a custom interface built using the ArcGIS JavaScript API, and automating the creation of FGDC compliant metadata for over five hundred scanned maps using Python and XML.

Research Assistant

January 2013 - May 2013

U-Spatial, University of Minnesota

Open GeoPortal

Collaborating with research units across campus and the state to implement a common data discovery portal. I developed a command line utility for the translation of metadata into an ingestible format using Python.

Research Assistant

January 2012 - September 2012

Minnesota Population Center, University of Minnesota

Integrated Spatio-Temporal Aggregate Data Series Project

Worked extensively with aggregate census data from 1790-2010, creating metadata to facilitate comparisons across time and different geographic levels. Part of the National Historic Geographic Information System.

TECHNICAL SKILLS

GIS / Databases / Cartography

- ArcGIS 9.x and 10.x (Desktop and Server) and extensions
- QGIS
- PostgreSQL/PostGIS
- CartoDB
- MapBox
- Adobe Illustrator CS4+
- GeoServer
- GeoKettle

Web Development and Programming

- HTML5/CSS3
- Twitter Bootstrap
- JavaScript
 - JQuery
 - Leaflet
 - CartoDB.js
 - OpenLayers (2 and 3)
 - Google Maps and Fusion Tables API

Web Development and Programming (continued)

- Python 2.6+
- PHP 5+
- KML
- Google App Engine
- MapServer
- Bash

Library

- XML/XSLT
- RDF
- OpenRefine

Other

- Git (version control)
- Windows/Unix/Mac operating systems
- Adobe Dreamweaver CS4+
- Adobe Photoshop CS4+
- Microsoft Office suite (particularly Excel)

KEVIN ROBERT DYKE

krdyke@gmail.com · 2012 W Arrowhead Dr, Stillwater, OK 74074 · 612.323.1524

www.kevinrdyke.com · <http://www.linkedin.com/pub/kevin-dyke/38/48b/a84> · <https://github.com/krdyke>

PUBLICATIONS (PEER REVIEWED)

Dyke, Kevin R., Ryan Mattke, Len Kne, and Shawn Rounds. *In press*. "Placing Data in the Land of 10,000 Lakes: navigating the history and future of geospatial data production, stewardship, and archiving in Minnesota".

Manson, Steven, Jerry Shannon, Sami Eria, Len Kne, Kevin Dyke, Sara Nelson, Lalit Batra, et al. (2014). "Resource Needs and Pedagogical Value of Web Mapping for Spatial Thinking." *Journal of Geography*. 113, no. 3: 107-117. doi:10.1080/00221341.2013.790915.

Manson, Steven M., Len Kne, Kevin R. Dyke, Jerry Shannon, and Sami Eria. (2012). "Using Eye-Tracking and Mouse Metrics to Test Usability of Web Mapping Navigation." *Cartography and Geographic Information Science* 39, no. 1: 48–60. doi:10.1559/1523040639148.

PRESENTATIONS

Invited Presentations

Dyke, Kevin (March 2016). *Geospatial Data Discovery at UMN*. Presented at the University of Minnesota Research Data Management Informal Community of Practice.

Mattke, Ryan and Kevin Dyke (December 2014). *U-Spatial Brown Bag Series*. Presented at University of Minnesota.

Dyke, Kevin (November 2014). *The U-Spatial Data Locker: Spatial Data and Research Support*. Presented at UMN Spatial Forum.

Dyke, Kevin and Ryan Mattke (November 2014). *Maps and Spatial Data*. Presented online to government publications regional meeting, University of Minnesota.

Dyke, Kevin (January 2014). *Curating Spatial Data: The Why of Preserving, Sharing, and Harmonizing the Where*. Presented at University of Minnesota.

Dyke, Kevin (February 2013). *Introduction to Google Fusion Tables*. Presented to GEOG 3523: Digital Mapping, University of Minnesota.

Dyke, Kevin (March 2011). *Spatial Modeling*. Presented to GEOG 5563: Advanced Geographic Information Science, University of Minnesota.

Submitted/Contributed Presentations

Dyke, Kevin (May 2016). *The CIC Geospatial Data Discovery Project: Harmonizing metadata for greater discoverability*. Presented at Upper Midwest GEOCON, LaCrosse, WI.

Dyke, Kevin and Ryan Mattke (October 2015). *Mapping Alternate Terrains: Geohumanities and cartographic expression*. Presented at North American Cartographic Information Society Annual Meeting, Minneapolis, MN.

KEVIN ROBERT DYKE

krdyke@gmail.com · 2012 W Arrowhead Dr, Stillwater, OK 74074 · 612.323.1524

www.kevinrdyke.com · <http://www.linkedin.com/pub/kevin-dyke/38/48b/a84> · <https://github.com/krdyke>

Dyke, Kevin and Ryan Mattke (October 2015). *Mapping Alternate Terrains: Geohumanities and cartographic expression*. Presented at Minnesota GIS/LIS Annual Conference, Duluth, MN.

Dyke, Kevin, Ryan Mattke and Justin Schell (April 2015). *Leveraging Library Expertise: Infusing collaborations and collections with geography*. Presented at Association of American Geographers Annual Meeting, Chicago, IL.

Dyke, Kevin and Jennifer Reinke (October 2014). *Making Spatial Data Discoverable: OpenGeoportal at the University of Minnesota*. Web map video presented at 2014 GIS/LIS Annual Conference, Rochester, MN.

Dyke, Kevin and Ryan Mattke (August 2014). *Metadata, Maps, MHAPO, and More: A tour of the John R. Borchert Map Library's digital initiatives*. Presented at Upper Midwest Digital Collections Conference, Minneapolis, MN.

Dyke, Kevin. (February 2012). *Google Fusion Tables for Community Based Web Mapping*. Presented at Association of American Geographers Annual Meeting, New York City, NY.