Jerome Chia-Rung Yang

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Areas of Interest

- Information visualization
- Cartography
- UI/UX design and development
- Human-computer interaction
- Data analytics

Education

Master of Science, Clark University

Worcester, MA | 2010-2012

Geographic Information Science for Development and Environment

- GPA 4.03/4.00
- Focus: cartography, data visualization, web mapping, spatial epidemiology

Bachelor of Science, National Taiwan University

Taipei, Taiwan | 2005-2009

Geography (with a minor in Sociology)

- GPA 3.96/4.00 (or 89.5/100; ranked 1st in a class of 36)
- Focus: cartography, GIS, urban geography, spatiotemporal analysis

Patents

Harrower, M., Bartley, J., Minami, M., Ponnusamy, P., Yang, J. C.-R. 2014. **Systems and Methods for Smart Cartography.** U.S. Patent Application 20160246468A1, filed on February 24, 2015 and issued on August 25, 2016.

Talks & Presentations

Esri User Conference

San Diego, CA | July 2014

"ArcGIS API for JavaScript, Mapping and Visualization"

"What's New for ArcGIS API for JavaScript"

Esri International Developer Summit

Palm Springs, CA | Mar 2014

"ArcGIS API for JavaScript: What Have You Done for Me Lately?"

Clark Cartography and Geovisualization Talks

Worcester, MA | Apr 2012

"Five Ways I Make Maps"

Clark Annual Graduate Student Council Multidisciplinary Conference Worcester, MA | Apr 2012

"Exploring the Association between Low Birth Weight and Exposure to Air Pollution in Massachusetts: Air Pollution Concentration Monitoring"

Association of American Geographers (AAG) Annual Meeting New York, NY | Feb 2012 "Characterizing Factors Associated with Low Birth Weight in Massachusetts Using Geographically Weighted Logistic Regression"

International Symposium on Remote Sensing and GIS Methods for Change Detection and Spatio-temporal Modelling (CDSM) Hong Kong SAR, China | Dec 2011

"Using IDRISI to Predict Japan's Nuclear Fallout Dispersion in the Pacific Ocean"

New England - St Lawrence Valley Geographical Association (NESTVAL) Annual Conference Montreal, QC, Canada | Oct 2011

"Exploring the Association between Low Birth Weight and Exposure to Lead Using Geographically Weighted Odds Ratio"

Waterkeeper Alliance Annual Conference

Evanston, IL | Jun 2011

"GIS Our Waterways Using Open Source GIS to Develop Interactive Maps for Our Waterways"

Awards & Honors

Geller Student Research Award

Marsh Institute, Clark University

Student Paper Award 1st Prize

NESTVAL Annual Conference

IDCE Department Fellowship

Clark University

Presidential Award

National Taiwan University

- Top 5% in class
- Awarded in 6 out of 8 semesters
- Ranked 1st in 2 semesters

Dean's Award Taipei, Taiwan | Jun 2009

National Taiwan University

- Top 10% in graduating class
- Ranked 1st in a class of 36

Professional Experience

Pointillist Boston, MA | 2014-present

Senior User Interface Engineer

Worcester, MA | Dec 2011

Worcester, MA | 2010 – 2012

Montreal, QC, Canada | Oct 2011

Taipei, Taiwan | 2006 – 2009

- I'm a primary developer of Pointillist, a web-based business intelligence tool that enables marketers to discover opportunities through their customers' behavior patterns. Along with my co-workers, I created a large-scale Angular- and d3-based graphic interface from scratch. This interface allows users to interact with their data as if they're playing games, and to see aesthetic visualizations immediately.
- As one of the founding engineer of this product, I also extensively involve in product design, technical research and cross-team communication.

Esri Inc. Redlands, CA | 2012-2014

Product Engineer (JavaScript)

- Developed and prototyped web mapping applications with extensive web programming (HTML5, JavaScript, CSS3, AJAX, D3.js, Dojo, etc).
- Developed, tested and promoted ArcGIS API for JavaScript (v3.1 v3.8): documentation, conference presentation, ect.
- Designed UI for the symbol configuration in ArcGIS.com map viewer
- Researched prospective web map advancement, such as web-based dot density map renderering, color ramp map renderering, etc.

Esri Inc. Redlands, CA | 2012

Intern (JavaScript)

- Tested ArcGIS API for JavaScript v3.0 and ArcGIS.com.
- Automated documentation generation process with Python, HTML5 and Visual Studio Intellisense.
- Prototyped and documented JavaScript applications for ArcGIS users.

Center for Geographic Analysis, Harvard University

Cambridge, MA | 2011-2012

GIS Analyst (WorldMap)

- Visualized world demographic and religious data on the WorldMap web mapping platform.
- Automated the process of parsing and integrating data from multiple sources using Python script.
- Assisted Harvard faculty to leverage web GIS technology for academic research.

Maine Department of Marine Resources

Boothbay Harbor, ME | 2011

GIS Technician

- Used Trimble GeoExplorer 2008 and ArcPad 10.0 to validate the accuracy of seagrass maps (groundtruthing).
- Developed an API-based web map application for the Maine Marine Patrol officers to report the locations of young eel harvesting activities online.
- Managed governmental spatial data of the government among multiple File Geodatabase (FGDB) and ArcSDE data servers.

National Children's Study

Worcester, MA | 2011

Research Assistant

- Visualized statistics (US Census and American Community Survey) and established spatial database for study area.
- Integrated GPS tracker, Garmin application, and Google Earth to provide dynamic map for field investigation.

GISDE Lab., Clark University

Worcester, MA | 2011

GIS Lab Manager

Provided technical support (desktop, printer, and GIS software) for 40 master's students.

• Collected and updated the information of GIS conferences, jobs, and resources; sustained a GIS resource website.

Map and Multimedia Lab., National Taiwan University

Taipei, Taiwan | 2008-2009

Cartographer and Map Editor

- Illustrated and edited maps for an annual map calendar (print volume: 3,000) to promote geographical education.
- Displayed data on maps for conference posters and a textbook by ArcGIS 9.2 and Adobe Illustrator CS3.