

# Luc Guillemot

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I'm an interaction designer with a focus on data visualizations and cartography. I live in San Francisco.

<http://lucguillemot.com>



## Experience

### University of California in Berkeley

**Postdoctoral Researcher**, Dept. of Geography

My work focuses on neighborhood change in the Bay Area, using **GIS and data science** to explore multidimensional spaces and their cartographic representation.

Awarded a \$70,000 **research grant** by the Swiss National Science Foundation.

### Swiss Federal Institute of Technology

**Cartographer & PhD student**, Chôros Lab

Lausanne, CH ◦ 2009 - 2014

I produced and **published maps** in scientific journals and newspapers, with a focus on electoral maps and urban issues.

### Swiss Federal Institute of Technology

**Teacher** at College of Humanities

Lausanne, CH ◦ Sept. 2009 - Nov. 2014

I **taught cartography** and map reading in Master's level classes, including one class on geopolitics.

### Landesvermessung und

### Geobasisinformation Brandenburg

**Intern** ◦ Potsdam, DE ◦ Summer 2008

I contributed to a **database of aerial photographs** dating back to WWII. I studied image optimization with a focus on wavelet compression technology.

## Education

### Swiss Federal Institute of Technology

(École polytechnique fédérale de Lausanne)

Lausanne, CH ◦ November 2014

**PhD** in Architecture and Sciences of the city

### Université de Toulouse

**& Institut National Polytechnique**

Toulouse, FR ◦ September 2009

**Master**, Geography & computer sciences (GIS)

### Humboldt Universität

Berlin, DE ◦ August 2007

**Bachelor** of Geography

## Skills

### Cartography

d3.js ◦ QGIS ◦ Mapbox ◦ Carto ◦ ArcGIS ◦ CartoCSS ◦ Adobe CC

### Programming

JavaScript ◦ R ◦ SQL ◦ CSS ◦ git ◦ L<sup>A</sup>T<sub>E</sub>X

### Languages

English & French: fluent ◦ German: working proficiency

## Selected projects

### Bay Area Geodemographics ◦ 2015-present (10 months) ◦ [Link](#)

- Visualized decade of change in neighborhood demographics using d3.js.
- Classified Bay Area 4,000 census tracts via hierarchical clustering of 24 Census variables over 10 years in R.
- Built JS library to automatically assign colors to multivariate maps using a force-directed graph on the perceptually consistent *Lab* color space.
- **Tools:** d3.js, javascript, R, Leaflet, OSM, Bootstrap.

### The Will of the People, visualizing primaries ◦ April 2016 (5 days) ◦ [Link](#)

- Scraped electoral data from the Web (in R using xPath).
- Built a model with R to calculate the ratio population/delegates sent by each county.
- Demonstrated unevenness of nomination process via interactive visualizations built with d3.js.
- Finalist of the *Major League Data Challenge*.
- **Tools:** d3.js, R, javascript, Bootstrap.

### Commuting Scales ◦ 2012 (2 months) ◦ [Link](#)

- Created interactive visualization of time accessibility to Lausanne's University campus by car and public transit.
- Scraped data from TomTom and railway agencies with PHP and SQL (~100,000 queries).
- Finalist of the *Festival International de Géographie's* visualization contest.
- **Tools:** d3.js, Mapbox Studio, CartoCSS, SQL, PHP.

### French presidential election ◦ 2012 (2 days) ◦ [Link](#)

- Published several maps in *Le Monde* on election day.
- Maps emphasize the urban pattern of votes.
- **Tools:** QGIS, XML, Adobe Creative Suite.

### Little Big City ◦ 2010 (3 months) ◦ [Link](#)

- Designed maps and visualizations using various urban data about one-million inhabitant metropolis.
- Created four 7-meter long printed panels exhibited at the *Biennale for Architecture, Design and Urbanism* in Bordeaux.
- **Tools:** ArcGIS, ScapeToad, Adobe Creative Suite.

I also write and make maps for the newspaper *Libération*.