

CHRISTOPHER CLARK

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EXPERIENCE

Senior Software / Data Visualization Engineer ~ *May 2019 - Present*
National Ecological Observatory Network (NEON) ~ Boulder, CO

Front end development for visualization of and general access to petabytes of public data for the continent-scale 30-year NSF-funded ecological study.

- Built interactive open-source visualizations for geospatial and time series data (d3, Leaflet)
- Rebuilt data exploration/download UI and applied performance analytics (React, Material UI)

Senior Data Visualization Engineer ~ *Feb. 2017 - May 2019*
Deepfield Networks / Nokia (deepfield.com) ~ Ann Arbor, MI

Full stack web development with a focus on data visualization, code base modernization, and application architecture for a petabyte-per-second-scale network infrastructure analytics application.

- Modernized developer culture by way of code review, automated testing, and data modeling
- Dev team leadership, mentoring, active recruiting, on-boarding, and agile process management

Senior Application Programmer / Analyst ~ *Jul. 2015 - Jan. 2018*
Center for Statistical Genetics, University of Michigan ~ Ann Arbor, MI

Full stack web development including data visualization, security, scalability, and open source community management. Mentored technical staff and biostatistics graduate students. Key projects:

- LocusZoom.js (locuszoom.org) - Interactive visualization of genome-wide association studies with d3; implemented for Type 2 Diabetes research with the Broad Institute of MIT and Harvard
- Genes for Good (genesforgood.org) - 80,000 participant genetic research study; LAMP web application with surveys, cognitive experiments, and personal genetic data distribution pipeline

Director, Software Development & Information Technology ~ *Aug. 2006 - Mar. 2015*
SparkFun Electronics, Inc. (sparkfun.com) ~ Boulder, CO

Built Dev/IT department from inception to staff of 15 (developers, sysadmins, and data analysts). Managed annual budget of \$1.7M. Architected development of eCommerce and ERP platform.

- Directly contributed to growth of annual revenue from \$3.8M in 2007 to \$32M in 2014
- Designed network and security infrastructure for new 80,000 ft² office and manufacturing space
- Presented technical, business, and strategic talks at conferences in North America and Europe

Image Processor / Web Developer ~ *April 2004 - April 2007*
Space Science Institute ~ Boulder, CO

Processed image data and developed web-based data processing and presentation tools for the Imaging Science Subsystem (ISS) of the Cassini mission to Saturn.

- Integrated content pipeline with NASA/JPL remote databases
- Built a science-grade web-based image processing GUI using Interactive Data Language (IDL)

Independent Web Developer ~ *Continuous, projects include:*

FamilyGiftRegistry.net

Free private registry for families to organize gift-giving events

Nuclides.org

Interactive d3 visualization of the elements and isotopes

EclipseTracks.org

Interactive visualization of solar eclipse events with Cesium

EDUCATION

University of Colorado at Boulder ~ *December 2007*
Bachelor of Arts, Mathematics ~ (Minor, Astronomy)

TECHNICAL

Languages etc.: Javascript (d3, React), Python, PHP, MySQL, PostgreSQL, Git, Docker, etc...
Media: UI and UX design, color theory, photography, videography, sound & video editing

PERSONAL

Passionate public speaker. Scientifically literate. Advocate for privacy and open source. Interests include camping, time-lapse photography, world travel, animals, and crossword puzzles.