## CHRISTOPHER CLARK

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## EXPERIENCE

**Senior Data Visualization Engingeer** ~ Feb. 2017 - Present Deepfield Networks / Nokia ~ 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.

- Major contributions to modernizing developer culture including repeatable processes for code review, diversified automated testing, planning, and documentation
- Dev team leadership, mentoring, active recruiting, on-boarding, and agile process management
- Spearheaded efforts to unify application data model with rigorous schema-based approach

**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.is (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) 75,000 participant genetic research study: LAMP stack web application with surveys, cognitive experiments, and administrative tools; 25,000 participants genotyped with secure personal genetic data distribution pipeline

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

Built Dev/IT department from inception to staff of 15. Hired developers, systems/network admins. QA, and data analysts. Managed an annual budget of \$1.7M for staff and all organization IT assets. Architected and oversaw development of eCommerce platform (sparkfun.com) and ERP system.

- 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 ft<sup>2</sup> 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
- Spearheaded creation of tool chain for processing image sequences into videos
- Built a science-grade web-based image processing GUI using Interactive Data Language (IDL)

**Independent Web Developer** ~ Continuous, projects include:

FamilyGiftRegistry.net **Nuclides.org** 

to organize gift-giving events

Free private registry for families 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, Salt, Docker, AWS... Patterns/Methodologies: MVC, Test-Driven Development, DevOps, Agile 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.