JON OGLE

jogledev@gmail.com **(970) 239-1168**

https://jogle32.github.io/portfolio/

DEVELOPER

Inventive, solution-seeking technology professional who succeeds in solving knotty problems with a can-do attitude. Proficient in a variety of languages and tools. Researches and applies advanced technologies to complete complex assignments that align with company's client-driven directives.

Coding Expertise – Languages and Tools:
JavaScript; D3.js; HTML & CSS/Sass; Canvas API; Java; npm; React; Plotly; Math.js; NodeJS; Postman; Wordpress; Elementor; MySQL; PostgreSQL; C/C++; Python; PHP; JSON; RESTful: Linux OS; Agile Methodology; Git, GitHub;

Computer Science, Programming and Web Development Courses:
Computer Science: Object-oriented programming; Data Structure / Algorithms; Computer Organization; Analysis of Algorithms; Numerical Analysis
Web Development: The Complete Web Developer; freeCodeCamp; Advanced CSS and Sass;

PROFESSIONAL EXPERIENCE

KARTOGRAPHIA **August 2021 - Present**

Software Engineer

Software firm which specializes in complex geospatial and big data problems;

Helped build fraud analysis and charting tools for the Center for Devices and Radiological Health (FDA) that enable investigators to detect fraud and create powerful data visualizations and dashboards.

Impact of contributions:

- Contributed significantly to the development of project BlueWave – a bespoke web app for the CDRH using relational graph database (neo4j).
- Wrote a robust charting library leveraging D3.js that allows users to visualize data with a suite of graph types.
- Produced complex geospatial mappings/analyses to investigate non-compliant manufacture and imports of medical devices that skirt FDA regulations.
- Built dashboards used by CDRH executives to analyze imports data.

SELECTED CONSULTING PROJECTS: **2018 – 2021**

- ***Pandemic modeling / graphing*** of growth and projection based on SIR differential equations. Variables could be manipulated (population size, vaccine, infectiousness, death rate); web app graphed projected results.
- ***Efficiently factored matrices and found eigenvalues, determinants and inverses,*** a programmatically complex project using advanced numerical methods. Built with HTML/CSS and JavaScript and math.js
  https://jogle32.github.io/portfolio/decompCalc/decomp.html
  https://github.com/jogle32/matrix-decomp/blob/master/decompCalc/main.js
- ***Built full-stack application*** while on a tutorial, ***which allowed the user to create an account and upload photos plus a machine-learning algorithm that would locate any faces in the photo***. React front-end and a PostgreSQL/NodeJS back-end.

EDUCATION

Colorado State University, B.S., Mathematics, 2018