

James Sorensen

Senior Software Developer and Systems Architect

Phone: +1 970 227 4231
Location: Greeley, Colorado 80634
Website: itsallelectric.org
LinkedIn: [linkedin.com/in/jamesasorensen](https://www.linkedin.com/in/jamesasorensen)

Skills

Languages: JavaScript, PHP, C/C++, Perl, HTML, Bash, Golang

Frameworks: Drupal 7, 8, 9, 10
Node.js, React.js

Tools: JQuery, CSS/SCSS, Bash, Composer, Drush, Git, NPM

Databases: MySQL, MariaDB, InfluxDB, PostgreSQL

Communications: MQTT, REST, GraphQL, CORBA

Drupal Hosting: Acquia, Platform.sh, Pantheon, Linode

Productivity: Agile, Scrum, Wrike, Jira, PhpStorm, WebStorm

Portfolio

Drupal Atomizer Module

Drupal Imager Module

LabTime Data Acquisition, Equipment Automation and Historian

Career Objective

Looking to architect and implement IIOT/MQTT solutions for science labs or production facilities where large amounts of data are acquired from Edge devices. The save that data into historian for analysis with Grafana.

I've created 10,000's lines spaghetti code to interconnect computers, equipment, devices, etc. over my career - I wish to atone for my past sins and bring forth the future with a full MQTT solution.

I specialize in creating user friendly UI's which allow users to easily enter large amounts of data and display that data in charts, tables, web pages, etc. I've also created several large one-page JavaScript apps that display within a Drupal page.

Experience

Aureon Ltd

January 2020 – August 2023

- CTO focused on equipment automation and data acquisition and analysis from a LENR (Low Energy Nuclear Reactor) plasma reactor.
- Prototyped full MQTT solution to control and acquire data from edge devices on plasma reactor. Display data real time to users and upload to InfluxDB historian with Grafana dashboards.
- Sole developer of Drupal 8 website hosted on Linode.
- Investigated project management solutions. Chose Open Project as our solution where I installed, configured, and implemented it throughout the company.

Ethereal Matters

July 2015 – Present

- Sole developer of website – architecture installation, site building, back and front end development, custom database queries, etc.
- Created [Javascript atomizer module](#) which displays atomic nuclei in interactive 3D. Allow users to create new nucleus configurations by themselves without help from me. Drupal creates pages and controls and presents a canvas where Javascript displays the nucleus. Drupal saves the configurations of atomic nuclei and the properties of the elements.
- Created [Javascript imager module](#) which allows users to view high resolution images easily in Drupal. Users can zoom, pan, rotate and cut the images. Users can also edit the brightness/contrast and hue/saturation/luminosity of an image and save all changes back into Drupal.
- Created custom multi-faceted database queries to sort and filter postings on the site – plus multiple other Javascript snippets that make the user experience fun.

Juilliard School of Music

January 2018 – August 2018

- Front and back end developer on worldwide team with 12 members.
- Used Paragraphs module, Twig and SCSS create very artistic page layouts each with JavaScript effects.
- Created multiple Views to display teachers, students and events.

Energy Central

December 2016 – August 2017

- Front and back end developer on team of 5 developers.
- Created multi-faceted database query to allow users to sort and filter by multiple criteria – author, date, topic, ranking.
- Replaced Panels layout implementation with custom method to layout pages reducing problems with keeping page configurations consistent.
- Took over front end and resolved multiple issues with page headers, spacing, location of elements being inconsistent from page to page.

Sleuthworks, Inc

January 1995 – December 2016

- Partner in business which created software to find microchip yield issues in the semiconductor manufacturing industry. For many years I was the IT department and did all the design, programming, installation and support of the system.
- Installed the software at multiple Hewlett Packard (3), AMD (3), Intel (2), Motorola (3), Texas Instruments (4), LSIL (1), Rockwell (1), Toshiba (1) and Chartered (1) semiconductor fabrication facilities. Even did an installation for DARPA/NSA at Fort Meade Maryland.
- Our Wafer Sleuth software was known for its ease of use and saved companies millions of dollars by finding production issues very quickly before a bunch of in process material was ruined. Many customers turned Sleuth into a verb – did you ‘sleuth’ that lot?