

## JOHN J. GERBAC

### Education

B.A. – Business Information Systems, Ashford University

### Professional Licenses and Certifications

Inductive Automation Ignition Gold 7.9 Certified  
Inductive Automation Ignition Gold 8.0 Certified  
Certified Scrum Master

### Awards

Inductive Automation Ignition Firebrand Award Winner – September 2019

### Professional Experience

Mr. Gerbac is a Developer for SCS RMC (Remote Monitoring and Controls). He is a Premier SCADA/MES Engineer who has designed, developed, and integrated MES, SCADA, SPC, and various other application solutions in numerous industries including landfill gas (LFG), manufacturing, building automation, food & beverage, and mining. Taking a consultative approach to systems integration, he works with organizations to make sure business needs are fulfilled within a project and helps to identify opportunities for improvement. Mr. Gerbac takes customer satisfaction seriously and aims to always exceed expectations. Notable projects that Mr. Gerbac has been involved in are described below.

**San Bernardino County, San Timoteo Landfill, Redlands, CA.** Developed edge of network supervisory control and data acquisition (SCADA) application on Ignition Edge that stores and forwards key datapoints to a centralized server for reporting and monitoring remotely. Commissioned centralized server and developed a SCADA application on Ignition 8 Perspective with HMI, live monitoring, control, data trending, reporting, and data export capabilities. Developed a Google integration module that autonomously reads, parses, and imports field report data from reports uploaded into Google Drive.

**Rogue Disposal, Dry Creek Landfill, Eagle Point, OR.** Upgraded a remote monitoring system for an LFG blower / flare station from Ignition 7.8 to Ignition 8.0 and added in functionality to monitor and control a new blower skid, chiller skid, and sump pump. The system allows the client to remotely view their control system, record data, and transmit detailed alarm messages.

**Confidential Clients, OH, TN, IA, MA, OK and MX.** Managed, designed, and developed a manufacturing execution system (MES) on Ignition 7.9 for a large appliance manufacturer with a read/write integration with their existing enterprise resource planning (ERP) system. Created a custom solution that is otherwise unavailable in the manufacturing systems market that enabled the client to produce accurate manufacturing schedules on their mixed-model lines and publish finished units into ERP. Designed and developed an inventory count consumer that published material usage to ERP at the appropriate stock locations to create real-time inventory monitoring. This enabled the design and development of tuggers (automated material delivery robots) routes to replenish material stock using just-in-time (JIT) methodology.

**Confidential Client, Thailand.** Project managed and lead a team of engineers in the development of a SCADA/MES system on Ignition 7.9 for a vegetable oil manufacturing/refining plant that integrated with the client existing ERP system. The system allowed for remote monitoring and control of operations and manufacturing schedule, overall equipment effectiveness (OEE) analysis, and statistical process control (SPC) to ensure product quality.

**Confidential Client, IL.** Designed and developed an employee training/tracking system on Ignition 7.9 to maintain regulated/required training documents for client's internal employees/contractors. The system monitors training expiration dates and sends out alerts to supervisors of upcoming training needs and allows a user to import scanned training certificates for storage.

**Confidential Client, WI.** Acquired a partially developed SCADA/MES system on Ignition 7.9 from a previous integration firm and managed the project redevelopment, completion, and upgrades. The system allowed for partially automated manufacturing line scheduling driven by requirements from the customers ERP through the import of production orders in sequence and allowed a line supervisor to override sequence manually by placing an order in an "on-deck" position. The system included an HMI for each respective manufacturing line, which allowed remote monitoring, scheduling, control, and data analysis. Designed and developed dashboards with line performance, upcoming schedule changes, and key performance indicators that were placed throughout their seven facilities.

**Confidential Client, IL.** Managed, designed and developed local fallback projects on Ignition Edge for 11 manufacturing lines for client. Local fallback projects are designed to be running in a dormant state until a network connection problem arises, which the local fallback would then spin up to take over control to mitigate line downtime. The fallback projects stored data and published to the centralized Ignition server once network connection was re-established. The Enterprise Administration Module (EAM) was utilized to connect local fallback projects as agents to the central Ignition server acting as the controller, and tasks were created to push application changes from the central server to the fallback projects to ensure project update synergy between servers. After an upgrade of the clients central Ignition server from Ignition 7.9 to Ignition 8.0, each Ignition Edge fallback projects was upgraded from Edge 7.9 to 8.0.

**Confidential Client, IL.** Designed and developed a control center dashboard on Ignition 7.9 spanning across 18 monitors mounted in sequence on top of the ceiling. Dashboards contained relevant process and machine data in real-time and trended on graphs.

**Hunter Industries, CA and MX.** Designed and developed a statistical process control (SPC) system on Ignition 7.9 with automated sample collection triggers based on time/production counts. Also allowed mold machine/part specific scheduling and load balancing to evenly distribute workload amongst inspectors. Out of control, out of specification, and Nelson rule violations triggered text message/email alerts to the configured supervisors and manufacturing engineers. Data trending tools included individual, X-bar, histogram, pareto, process performance, box and whisker, parts per million defective, and process capability charts in both ad hoc and saved configuration fashions. Raw and processed data exports were also available.

**Confidential Client, NV.** Designed and developed a data collection and reporting system for a mining operation on the .NET framework. The system connected to an existing OPC server (Kepware) and allowed users to configure data collection frequency and metadata for each datapoint. Regulatory and efficiency reports were also developed and configured to be autonomously sent to configured personnel through email as well as ad hoc reporting.