

# JAVAN WHITNEY-WARNER

+1 (573) 825-2518 • javan@jwhitney-warner.com • Chicago, IL • www.jwhitney-warner.com  
linkedin.com/in/jwhitney-warner/ • www.github.com/JavanW-W

---

Software Engineer | Process Controls & Automation | Data Management | Chemical Engineer

## WORK EXPERIENCE

### Software Engineer

Numat Technologies, Chicago, IL — Mar 2023-Present

Django Tracking: Maintained, refactored, and expanded company Laboratory Information Management System (LIMS) and Manufacturing Execution System (MES) within a Django web framework in a production environment to support R&D, Engineering, and Manufacturing analytical groups.

- Communicated with Operators and End-users of data in the R&D and Engineering groups to determine the appropriate data structures to create to allow for short-term display of analytical data in the LIMS and/or MES and longer-term dashboarding in tools such as Spotfire and the creation of transfer functions to describe product properties and performance
- Evaluated how process equipment and analytical instruments communicate and/or report data, writing python interfaces with serial equipment as necessary (public repositories of the libraries published to GitHub for IKA and Copley devices), and parsing reports to assign data to object models

### Senior Process Engineer

Numat Technologies, Skokie, IL — Oct 2022-Feb 2023

- Designed and built an automated packed-bed breakthrough system, complete with building, wiring, and programming a programmable logic controller (PLC), web-based Human-Machine Interface (HMI) for communicating with the PLC, control routines in python and YAML, and scripts to parse and sync output data to an internal production database (Postgres) to be viewed in LIMS

### Process Engineer

Numat Technologies, Skokie, IL — Oct 2020-Oct 2022

- Designed and built an automated dual-flow permeation system to measure the breakthrough time of a vapor stream of a Chemical Warfare Agent (CWA) simulant through textile samples
- Migrated project data from local files (i.e., individual excel sheets) to centralized spreadsheets and databases (Google Sheets, LIMS) and demonstrated the utility of project-specific Tableau dashboards to enable data-driven decision making

## EDUCATION

- **B.S., Chemical Engineering, Cum Laude**, Northwestern University, Evanston, IL 2016-2020
  - Minor, Music Technology, Bienen School of Music
  - Certificate, Sustainability & Energy, Institute for Sustainability and Energy at Northwestern

## TECHNOLOGIES & LANGUAGES

- **Languages:** Python, Ladder logic, HTML, Front-end JavaScript, MATLAB
- **Technologies:** Django, Tableau, Spotfire, PostgreSQL, Git
- **Other:** Programmable Logic Controllers (PLC), Test-Driven Development (TDD)

## OTHER

- **Professional Memberships:** Society of Women Engineers (SWE), Engineers for a Sustainable World (ESW), ChiPy (Chicago Python User Group)
- **Interests:** Audio Engineering, Sustainability, Music & Theater