JAMIE ELLIS

SOFTWARE ENGINEER | CHEMICAL PROCESS ENGINEER

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GITHUB | LINKEDIN | TJELLIS.com

TECHNICAL SKILLS

SOFTWARE LANGUAGES: Python, JavaScript, Java, HTML, CSS; **FRAMEWORKS:** Flask, Express, Node.js, Spring Boot, MySQL; **LIBRARIES:** React; **DATABASES:** MySQL, MongoDB; **TOOLS:** Power BI Report Builder, AWS, GIT

ADDITIONAL SKILLS: REST API, LEAN Manufacturing, FMEA/Risk Assessment, Root Cause Analysis, Model-based Problem Solving, SPC, SEM, Microscopy

EDUCATION

- B.S., Chemical Engineering, **University of Massachusetts Amherst** | 2014-2018
- Software Engineering Bootcamp, **Coding Dojo** | 2021-2022
  - 32 weeks intensive coding bootcamp: 1000+ hr. of full-stack-web development, pair programming, and algorithms

SOFTWARE PROJECTS

Numericle App - Solve for the daily Math Equation - "Wordle" styled puzzle — Numericle Webapp | **GITHUB REPO**

- Designed this MERN-based application with a scalable backend for interchangeable features to easily alter aspects of the game's core functionality. Can easily change the number of guesses, or length of equation and the application will scale accordingly.
- Deployed via Amazon Web Service (AWS) for the accessibility of alpha test users. Through the project's deployment, Continuous Integration and Development (CI/CD) was demonstrated by providing users quality of life enhancements and feature updates.
- Audited the application with insight tools to identify the apps key performance factors. SEO/Accessibility by following webapp best known practices, and continually tweaking the opportunities quantified as most impactful to the performance metrics.

Night at Lancaster's App – Interactive detective application for Mystery Murder Party — **GITHUB REPO**

- Developed the application using SQL, Spring, and Java to assist users playing the mystery game, "A Night at Lancaster's Theater."
- Increased customization and reusability of the application by creating a developer's page for user/detail manipulation within the game, and integrating randomization factors throughout the application for more unique experience for each playthrough.

PROFESSIONAL EXPERIENCE

SIEMENS HEALTHINEERS - Process Engineer — **6.2022 – present | Walpole, MA**

- Implemented a JavaScript app to analyze and group all matching buffer formulations in manufacturing. Hundreds of procedures for buffer creation were parsed to consolidate production efforts - eliminating thousands of labor hours, and save >$1M/year.
- Collaborated daily with Quality Engineers/Teams to resolve processing deviations. Providing remedies to malfunctioning parts, estimating the impact on the product, and effectively identifying and implementing preventative measures – i.e., training, maintenance updates, replacing components - to ensure sustainably in producing Millions of Dollars of product per day.
- Leveraged industry and risk analysis expertise to procure quotes from prospective vendors, providing myself and fellow engineers with design schematics to optimize and ultimately obtain high quality >$2M processing equipment.
- Qualified, Installed, and Validated heat-stress systems alongside the appropriate internal and external teams, while ensuring compliance with the FDA, DEA, and other governing bodies to expand manufacturing's capacity to produce for customers

INTEL CORPORATION - *Process Engineer (Data Analytics Group Team Leader)* — **9.2018 – 6.2021 | Chandler, AZ**

- Developed and introduced an automated data reporting system with SQL/Python/Power BI/JMP that graphed and displayed data which transformed and simplified how hundreds of engineers reviewed active and potential issues that may impact wafers.
- Sustained multiple wet chemistry processing machines, and was responsible for their preventative and reactive maintenance, as well any hardware/software upgrades on the machines to ensure seamless operation for the factory's production.
- Key contributor to organizational growth by facilitating interviews of engineers and technicians and producing training documentation to translate technical jargon that improved learning of 100+ technicians and new hires.
- Resolved unknown issues via Work Orders, and Model Based Problem Solving mitigating risk defects by analyzing historical data and potential models that correlate known physical or chemical abnormalities.