Austin Tricquet

PROFILE SUMMARY

Industrial and Systems Engineer seeking to start a new career as a Junior Developer. Excellence in designing solutions for a wide range of technical and complex manufacturing processes. Gained invaluable experience establishing trust and finding solutions with difficult customers and project stakeholders in a prison environment. Actively using Python at work revealed a passion for software development and sparked a desire to pursue a career in the Technology field. Currently learning full stack web development through online classes.

TECHNICAL SKILLS

Languages

Experienced: Python, JavaScript
Familiar: SQL
Learning: TypeScript

UI/Frameworks

Experienced: HTML, CSS, Bootstrap 4, jQuery, Tkinter, Django
Learning: Angular

Server-side

Experienced: Django
Familiar: Express JS, Node JS

Database/ORM

Experienced: PostgreSQL
Familiar: MongoDB, mySQL

Packaging Tools/Development

Experienced: PIP
Familiar: NPM

IDE/Tooling

Experienced: Visual Studio 2019, VSCode, Sublime Text, Command Prompt, Git & Github, Trello
Familiar: Postman

Methodologies/SDLC

Familiar: Agile, Scrum, Kanban, Waterfall

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WORK EXPERIENCE

Shaw Industries Group, Inc. | Enoree, SC **June 2018 - Present**
Industrial & Process Improvement Engineer

Technical/Development:

- Selected the technology stack and designed, developed and implemented a Python application to streamline the hourly payroll process for 300+ employees, calculate financial labor reports and pay for each employee; replacing an outdated and insecure system, while reducing set-up and runtime.
    - *Problem:* Prison PI using excel spreadsheet designed by inmate to pay inmates for contract labor for Shaw Industries.
        - Confusing and complicated system.
        - Low accountability for pay accuracy.
        - Insecure inmate/employee private information.
        - Few know how the system works or how to maintain system.
    - *Solution 1:*
        - Technologies and tools used: Python, Tkinter, Microsoft Excel, Visual Studio
        - Python script loads a roster file from excel and allows user to input hours and production for each person.
        - Create a GUI with Tkinter for entering hours instead of using Microsoft Excel
        - Prevents user errors in setting up old spreadsheet each week
        - Keeps saved data in secure file on a shared network drive and compressed to prevent easy access to private information.
        - Python script was converted to EXE file for local distribution.
    - *Problems with Solution 1:*
        - Limited programming experience led to poor design of code which became an issue in expanding the software to include additional departments and shift codes used in calculations.
        - Tkinter limitations and UI layout was poorly designed and need a more modern implementation.
        - Fixing bugs and issues with deployment, became increasingly difficult due to poor code design.
    - *Solution 2:*
        - Technologies and tools used: Django, Python, HTML, CSS, Javascript, JQuery, Bootstrap 4, PostgreSQL, VSCode, Git & Github
        - Used Django and Python to design a web application to replace the first Solution
        - Better experience led to better practices to keep code easier to work with and scalable.
        - Used Git and Github for version control and logging updates on progress during development.
        - Added new features including: proper user Authentication, User permissions, Admin panel to add users, change user permissions, edit employee information, Add and remove departments and work locations etc.
        - Overhaul of UI look and layout using HTML, CSS, Javascript, JQuery, and Bootstrap 4
        - Currently in Testing Phase before deploying to end users.

- Created a google sheet dashboard to store manufacturing production data and to analyze performance.
    - SQL queries embedded in the dashboard pull data of underperforming products and helps quickly discover the top defects and their source.
    - Trends in data help measure performance of improvement projects.

Process Improvement/Engineering:

- Working on several critical to mission projects for new plant start up in max security prison:
    - Establishing new supply room in Peoplesoft to add new parts necessary for equipment
    - Training inmates and Shaw staff on supply room usage in new plant
    - Working on establishing accurate performance metrics for new finish line specifications.
- Actively managing supply room daily operations and projects to improve supply room system.
    - Managing two supply room employees to issue and receive parts on daily basis
    - Currently implementing a Kanban System to improve supply room accuracy and reliability.
- Creating annual and quarterly budgets for capital projects and operations for three manufacturing plants.
- Analyzing the cost and viability of new and ongoing capital projects ranging upwards of $500K.
    - Managing the performance of ten ongoing annual projects saving the company $800k in total.
- Developed an approved business case to procure larger equipment, increasing the throughput of material of a manufacturing process and saving $58K annually.

EDUCATION

Auburn University | Auburn, Alabama **May 2018**

- Bachelor of Industrial and Systems Engineering
- Lean Six Sigma Green Belt Certified

WestRock | Cottonton, AL **May 2014 - December 2015**

Internship Co-op with Auburn

- Learned basic SQL and wrote queries to collect data for downtime reports given to upper management.
- Worked on a team tasked with gathering and analyzing data downtime data for early implementation of reliability engineering practices and predictive analytics and maintenance at WestRock.

CONTINUING EDUCATION

Udemy **January 2019**

Angular 8 The Complete Guide | 37 Hours

- *Learning Technologies:* Angular 8, Angular CLI, TypeScript, VScode
- *Learning concepts:* SPAs, creating custom directives and components, modules in Angular.
- Recently started course.

Full Stack Web Developer Bootcamp | 47 Hours

- *Learning Technologies:* HTML5, CSS3, Bootstrap 3 & 4, JavaScript, jQuery, Command Line, Node JS, Express JS, MongoDB, Postman, VScode, Sublime Text

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- *Learning Concepts:* static vs dynamic web pages, front end vs back end, RESTful routing, APIs, user authentication.
- Currently finishing the final project.

Agile Fundamentals: Scrum, Kanban, and Scrumban | 4.5 Hours

- *Learning concepts:* Scrum, Agile, Waterfall, Kanban, Scrumban
- Course completed.