Simpsonville, SC | austintricquet@gmail.com

#### 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

Interested: TypeScript, Dart, C#

#### **UI/Frameworks**

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

Familiar: Angular

Interested: React, Flutter

#### Server-side

Experienced: Django

Familiar: Express JS, Node JS Interested: Firebase, AWS

## 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

# 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hourly payroll process for 300+ employees, calculate financial labor reports and pay for each employee; replacing an outdated and insecure system, while reducing set-up and runtime.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.
  - o 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.
  - o 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
  - o 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

- 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.