ALEX GARDINER

SALEM, MA

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WWW.ALEX-GARDINER.COM · WWW.GITHUB.COM/AUGARDINER

SKILLS
* Familiar

- **Languages:** Python, Flask*, HTML/CSS, Javascript*, React*
- **Data:** Postgres, MySQL, Pandas, Matplotlib/Plotly, Reporting Tools i.e. Periscope
- **DevOps/Tools:** Git, Linux/Bash*, Docker, AWS*
- **Hardware:** Additive Manufacturing, CAD, Machining, Tooling
- **Nontechnical:** Project Management/Agile, Technical Writing, Customer Service, Presentation, Graphic Design

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EXPERIENCE

Markforged   **Waltham, MA**
Senior Data Systems Engineer   *March 2022-November 2023*

- Built web applications used in manufacturing to improve operator effectiveness and product traceability
    - Maintained MySQL database to store manufacturing data
    - Used Inductive Automation's Ignition platform to create polished UIs
- Analyze manufacturing data to enable analysis and advanced decision making
    - Developed a system of batch processing jobs to transform data into digestible form
    - Used combination of SQL queries and Python to vizualize/analyze data
- Wrote firmware running on manufacturing equipment to enable real-time quality and inventory control
    - Contributed to embedded Python program that measures and analyzes filament diameter timeseries data
    - Wrote unit tests for firmware
- Maintained IT/OT infrastructure and built DevOps tooling to boost system reliability and developer efficiency
    - Managed series of Linux servers and containers that host/run all facility services
    - Used Docker to create a portable development environment
- Led digital transformation efforts to improve factory intelligence
    - Used OPC to integrate with factory equipment and automate telemetry data collection
    - Built prototype Industral IoT infrastructure centered around MQTT

Technical Solutions Engineer II   *February 2019-March 2022*

- Provideed end-user support for composite additive manufacturing systems to improve customer experience
- Integrated data into support process by analyzing existing sensor device data
- Deployed app to AWS that parses device logs and displays pertinent data

Folsom Custom Skis   **Denver, CO**
Process Engineer   *October 2016-October 2018*

- Developed custom ski geometry and material construction
- Advanced tooling and manufacturing techniques to increase and streamline production
- Built a digitally integrated manufacturing database to increase and track production pace
- Developed new website to increase online presence and sales

Charles Riverboat Company   **Cambridge, MA**
Ship Captain   *June 2010-Present (P/T)*

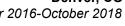- Hold USCG Issued 100 Ton Master License and TSA Issued TWIC Security Clearance

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PROJECTS
- Click: An app for musicians that visualizes progress w/ a built-in Metronome (Flask, Typescript, and React)
- Hot Stuff: A data-oriented app that visualizes popular music trends (Flask and React)
- Prints Albert: A virtual 3D Printer that prints "parts" from a user-managed library (Express.js, Javascript, HTML)

EDUCATION

University of Denver – *BS, Mechanical Engineering*   **2016**

Holderness School – *High School Diploma*   **2011**