

# ANTHONY CLERC

Software Tech Lead | Digitalization | Manufacturing

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## SUMMARY

I am committed to the green transition and inspired by the potential of sustainable technology to drive meaningful change, without discarding the need for everyone to make an effort. I embrace acquiring new skills and technologies to broaden my horizons. I am driven by the exciting possibilities that innovation and discovery bring. Beyond my professional pursuits, I am an advocate for fitness and outdoor activities, as I believe in the importance of maintaining a balanced and active lifestyle.

Professionally, I am an experienced Software Tech Lead with over 6 years of expertise in industrial connectivity, factory digitalization, and large-scale system integration. Specializing in designing and implementing robust software solutions for manufacturing environments, with a proven track record of deploying edge software across 1000+ devices in production settings. Combines strong technical knowledge in cloud infrastructure, containerization, and edge computing with effective leadership skills to build and mentor high-performing engineering teams.

## KEY ACHIEVEMENTS



### Traceability Software Development

Developed traceability software for complex battery manufacturing processes, improving quality control and process improvement.



### Fullstack MES Engineer

Played a pivotal part in connecting the technical aspects of automation with cloud development.



### Factory Digitalization Success

Designed and implemented digital frameworks in over 1000 machines across multiple factories. Worked with OPC Foundation and VDMA on machine interface standardization.



### Team Growth

Built, mentored, and led a team of 5+ software engineers responsible for the development and commissioning of edge software.

## EXPERIENCE

09/2023

Stockholm, Sweden

### Software Tech Lead

#### Northvolt - Forward Deployed Engineering

- Developed and implemented connectivity standards for battery production processes
- Led the design and integration of equipment across various production lines, including Formation and Aging, Cell Assembly, and Slurry Mixing, for Northvolt battery gigafactories expansions
- Assisted in the establishment and scaling of a digitalization team within a joint venture company
- Designed and developed traceability software tailored for battery manufacturing
- Mentored, onboarded and supported several software engineering teams, fostering their growth, integration and development

06/2022 - 09/2023

Stockholm, Sweden

### Software Engineering Manager

#### Northvolt - Digital Blueprint

- Managed a team of software engineers focusing on the productization of factory digitalization and integration frameworks currently deployed in over 1000 individual machines in Northvolt's production lines

10/2021 - 06/2022

Stockholm, Sweden

### Software Team Lead

#### Northvolt - Digital Blueprint

- Responsible for hiring and leading a team of software engineers tasked with the development, implementation, and verification of technical specifications for factory connectivity
- Spearheaded the development of edge software designed to facilitate large-scale factory integration
- Deployed and validated the software at the first Northvolt Gigafactory
- Participated in the commissioning of the inaugural giga-scale production lines

09/2018 - 10/2021

Stockholm, Sweden

### Software Engineer

#### Northvolt - Automation Department

- Developed from the ground up state-of-the-art edge software in Golang, successfully deployed across over 1,000 devices
- Created an API validation tool to ensure supplier integration aligns with REST API definitions in OpenAPI, resulting in a significant reduction in commissioning and testing efforts
- Designed comprehensive technical specifications for both edge layer and cloud integration
- Oversaw the integration and commissioning of various battery manufacturing equipment
- Supported the initial deployment and development of Northvolt's innovative Manufacturing Execution System (MES)

## EXPERIENCE

08/2017 - 02/2018

Stockholm, Sweden

- Teaching Assistant  
**Kungliga tekniska högskolan**
  - As a teaching assistant in the courses of mechatronics and embedded systems, my responsibilities included supervising, assessing, and supporting students during laboratory sessions.

## EDUCATION

01/2016 - 01/2018

Stockholm, Sweden

- Master's degree, Mechatronics, robotics and automation  
**Kungliga tekniska högskolan**
  - Mechatronics is the synergistic integration of mechanical, electrical, control and software engineering

01/2012 - 01/2015

Neuchâtel, Switzerland

- Bachelor of Science (BS)  
**Haute Ecole Arc - Engineering**
  - Microengineering with a major in Industrial Engineering
  - Ranking A

## LANGUAGES

French  
Native



English  
Proficient



## SKILLS

**AWS** **Golang** **MES** **Kubernetes** **Rest APIs** **Industrial Internet of Things (IIoT)** **Digitalization** **OPCUA**

**Industrial Manufacturing** **Leadership**

## PROJECTS

**Mechatronic Sculptures: Karl Dunér Contemporary Art and Design Exhibit**

📅 03/2018 - 08/2021 📍 Stockholm, Sweden

🔗 <https://www.karlduner.com/past-exhibit#/the-island-2020-at-si-paris/>

- Supported the development of the mechatronic software for kinetic sculptures by an artist's work for an exhibit at a museum for contemporary art and design
- Developed using a wireless ROS network and ESP32 nodes in C++
- Monitoring of the robots with self developed Flutter App and open source software (Grafana, Influx, ...)