

Software Developer

PLC for Energy Management Systems

This is an exciting opportunity to play a meaningful role in the “Energiewende” (transition to renewable energy)!

Autarsys is a Berlin-based manufacturer of containerized energy storage systems (ESS) for renewable energy applications, specializing in hybrid systems. Our technology makes renewable systems more energy efficient and cost-effective, with the technical capacity to increase the share of renewable energy by up to 100%. Autarsys develops on-grid and off-grid projects in all corners of the world including Asia, Africa, Australia, and Europe. *Find out more at autarsys.com.*

JOB DESCRIPTION

We’re looking for a software developer to support us in further developing our energy management systems (EMS) for renewable energy microgrids as we expand our product’s technical capacities. As part of a global team you will help bring renewable energy to all corners of the world.

Autarsys develops new software functionalities using PLCs by Beckhoff and programming standards according to IEC 61131-3. Most, if not all programming is conducted in Structured Text (ST).

We’re looking for someone who will:

- **Implement control schemes** for system components (e.g. air-conditioning-units, etc.)
- **Develop communications interfaces** with devices through standard industrial Fieldbus systems (e.g. ModBus-RTU/TCP, CAN, etc.)
- **Design system architectures and interfaces** between the PLC and the SCADA system
- **Take initiative:** A successful candidate is will take initiative interpedently to improve our product. We’re a small team with an all-hands-on-deck philosophy to collaboration.

Beyond PLC programming, you will develop **Windows programs in various languages (C/C++, Java, ...)** and **scripting frameworks (Node.js, Python)**. The purpose is to automate the project development process (automated post-build steps) and implement automated functionalities (e.g. automatic update procedures).

Note: The job will include some travel. Due to the global nature of our projects and small team size, there may be times when you’re expected to troubleshoot issues at odd hours or on weekends.

REQUIREMENTS

We're looking for someone with experience in:

- **Implementing software in IEC 61131-3 Structured Text**
 - Preferably some insight into more special concepts of Codesys v3:
 - Object orientation (inheritance)
 - Interfaces
 - Preferably, familiarity with specifics of the TwinCAT3 framework by Beckhoff
- **ModBus-RTU/TCP and other industrial fieldbus systems**
- **Visual Studio** which is the designated IDE by Beckhoff with which the TwinCAT3 engineering framework has been integrated
- **Windows administration:** The PLC runs Windows Embedded Standard 7, so these systems need to be administered

Languages: English (required); German (additional preferred)

We're looking for someone with a strong command of the English language as we must effectively document our projects for our worldwide customers. Plus, our local team is very international. :)

PREFERED QUALIFICATIONS

- Degree in mathematics, software engineering, etc.

Experience in:

- Implementing software in C/C++
 - Console applications
 - GUI applications, e.g. using Qt
- Git or a similar version-control system
- Scripting frameworks like Node.js or Python
- System administration
 - For example: setting up networks and maintaining reachability of all components
 - Setting up routers
- Machine Learning techniques and relevant software tools and libraries of various scripting frameworks
- Or an understanding of microgrid systems, renewable generation, diesel gensets would be great

Please submit the following to **info [at] autarsys.com** :

1. Brief cover letter (in body of email) regarding your qualifications and interests as they pertain to the job description and requirements;
2. C.V.

Deadline for submitting applications is Friday, May 31st

Email info [at] autarsys.com in case of any questions.

We look forward to receiving your application!