Job offer, 26 November 2021

CSP Services is an innovative service and technology company in the solar industry, which was founded in 2007 as a spin-off from the German Aerospace Center (DLR). We develop technological innovations and implement smart solutions to advance renewable energy projects around the globe. As a link between academic research and large industrial ventures, we strive to make an impact on a sustainable future. To reach this goal, we offer developers, operators and owners of solar power plants technology-oriented and knowledge-intensive services, starting with solar resource assessments, through quality monitoring during construction and operation, to long-term optimization of yields. With our specialized optical measurement systems, we are world market leader in the quality assurance of concentrating solar fields. For further information please visit our website www.cspservices.de.

CSP Services España, S.L. is based in Almería at the Mediterranean coast in the south of Spain. We work very closely with our headquarter in Cologne. Many projects are implemented in a division of labor between the local teams in order to make optimum use of the know-how of the entire group. In **Almería** we are looking for:

Computer Scientist: Artificial Intelligence for Solar Power (m/f/d)

In concentrating solar power (CSP) plants thousands of sensors measure mirror tracking angles, fluid temperatures, pressures and mass flows, tank levels, wind speeds and sun irradiances for control & monitoring purposes. They feed the core of the operating system, producing millions of data points day after day. Artificial intelligence (AI) / machine learning (ML) has shown great potential in numerous applications for which data are abundant. The Computer Scientist will design and implement spatial-temporal statistical models and apply cutting edge machine learning techniques to solar field operational data with the goal to improve plant efficiency, reduce maintenance effort and increase component lifetime. If interested in aerial surveying, the candidate characterizes solar fields using UAV-based optical measurements (hybrid techniques using photogrammetry and deflectometry).

Your tasks:

- Analysis of operational data of solar plants using artificial intelligence / machine learning (in collaboration with leading AI research center from Germany)
- International R&D project participation or project management (based on candidate experience)
- Planning and execution of solar field inspections, in cooperation with international customers and partners
- Design and implementation of spatial and spatial-temporal statistical models
- Programming of a learning system and human machine interface
- Composing of measurement and project reports as well as technical documentation in English

Required profile:

- Excellent graduation in computer science, physics, mathematics, robotics, informatics or similar
- 2+ years hands-on experience with big data, artificial intelligence or machine learning (either PhD or job)
- Very good programming skills (any of MATLAB, Python, C++, R, Java)
- Analytical skills, creativity and good communication
- English language proficiency in business as well as in technical context
- Very good knowledge of German or Spanish (knowledge of both is a plus)
- Team player with an open-minded attitude towards new challenges and foreign cultures
- Excited about living in Almería and occasional international travel
- Motivation to support the global energy transition by assisting sustainable energy projects

Preferred additional experience:

- Experience in concentrating solar power (CSP) and/or photovoltaic (PV) systems
- Experience with data visualization, data exploration, SQL, cloud platforms
- Time-series data analysis experience
- Creativity in combining spatial-temporal modeling with physical models
- UAV experience (system integration or piloting)

Our offer:

- Full-time, fixed term contract, with desired permanency afterwards
- Experience and performance related salary with bonus payments
- Teamwork with motivated high-level experts and modern office equipment
- Flexible working hours on a flex-time basis
- International working environment and networking with cutting-edge research
- State-of-the-art large-scale metrology and UAV systems

Your profile fits our requirements and you are enthusiastic about this task? Then please send your complete application documents, including your salary expectations, an indication of your earliest possible starting date and a letter of motivation (1 page) in a single document (pdf) to Mr. Gradl (**jobs@cspservices.de**). All incoming applications will be treated in strict confidence.

CSP Services España, S.L.
Paseo de Almería 73
04001 Almería · Spain
T: +34 950 274350
F: +34 950 277189
www.cspservices.de

Administradores
(Managing Directors):
Dr. Klaus Pottler
Dr.-Ing. Steffen Ulmer

Domicilio Fiscal
(Registered Office):
Registro Mercantil de Almería
Tomo 1387, Folio 117
NIF: ES-B04 695 052

Datos Bancarios (Bank Account):
IBAN: ES7130580000422720081491
BIC (Swift-Code): CCRIES2A
Cajamar · Almería · Spain