Ali Abbas Baygi
Kaiser-Friedrich-Straße 10627, Berlin | alibaygi@gmail.com

MSc in Process, Energy and Environmental (PEESE) at TU Berlin with the knowledge of Data Science, Machine Learning, Deep learning (NLP), IIoT, Industry 4.0, FEM and CFD simulation. Passionate for deep work and able to quickly master hard things.

Education:

Technische Universität Berlin (TU Berlin)
MSc in Process, Energy and Environmental Systems Engineering (PEESE), Oct 2016 to Oct 2020

Iran Khajeh Nasir Toosi University of Technology
MSc. in Mechanical Engineering, Sep 2005

Iran Mazandaran University
BSc. in Mechanical Engineering, Jan 2002

Professional Experience:

FundM Maschinenbau (Samrtblick) (Berlin-Germany)
Data scientist from Jun 2019 to now
- Sensor data analysis, Data recording and Data processing
- Time series classification, pattern recognition and Feature extraction
- NLP (e.g. NER, PoS, Topic Modeling, Sentence Classification, NMT)
- Experience with deploying models in production environment using fastAPI and streamlit
- Application containerization, e.g. Docker
- Computer Vision
- Data analysis
- Algorithm development
- Software development
- Research in the field of Data Mining, Big Data, Industry 4.0, IoT

Fraunhofer-IWF, (Berlin-Germany)
Internship, Simulating heat transfer and the influence of cooling on the cutting process Feb 2019 to May 2019
- Image processing with digital microscope VHX-5000 Series
- 3D model development with NX
- FEM and CFD simulation of heat transfer between tool and chip with ANSYS Workbench

Energy Industries Engineering & Design, (Tehran-Iran)
Project Engineer and QHSE coordinator, NGL 3100 Project, Apr 2012 to Sep 2015

- Implementing and supervising the Quality and HSE system in the project through generating Quality and HSE Plan.
- Conducting comprehensive audits according to the ISO9001, ISO/TS29001, ISO14001 and OHSAS18001 standards.
- Data Analysis, monitoring and measurement using statistics method such as Pareto chart and fishbone diagram, etc.
- Monitored, analyzed & evaluated failures or qualitative problems of the project and presenting necessary mechanisms to the project management team.

Energy Industries Engineering & Design,(Iran)
Quality Engineer, SP17&18 Project, Oct 2008 to March 2012

- Coordinate ISO standards and perform the extensive audits according to ISO9001, ISO14001 and OHSAS18001 standards
- Developing statistical analysis to improve the project's performance by providing clear vision for problems and their corresponding solutions.
- Analyzed data related to the project customer satisfaction

Tabdil Energy Paya Company
HVAC Engineering, March 2006 to Sep 2008

- Designed heating and cooling systems per design specifications instructions.
- Determining heating and cooling requirements for buildings
- Running Computer Simulation of load calculations and energy performances

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software and programming languages:

Machine learning and Data Analysis	Python (Pandas, Numpy,Matplotlib, SciPy, Sklearn, Seaborn, Cantera, etc),Tableau
Deep learning (ANN, CNN, RNN)	Tensorflow 2.0, Pytorch, Transformer (Hugingface)
Big Data	Apache drill, Apache Spark
Numerical Analysis and Optimization	Matlab and Python
Git repositories management	Gitlab
DB	SQL, MongoDB, Elasticsearch
Design and Simulation	AVEVA PDMS (Piping 3D model design), NX, CATIA, ANSYS Workbench, Career
General	MS office

Certification

- TensorFlow Developer Certificate
- Machine Learning for Production (MLOps)
- Deep Learning Specialization
- Python for Data Science and Machine Learning Bootcamp
- Machine Learning A-Z™: Hands-On Python and ML algorithms (such as regression, logistic regression, classification, random forest, clustering, artificial neural network, etc)
- Statistics for Data Science and Business Analysis
- Programming numerical methods in Python

Project works at TU berlin
- The Common Good Data Analysis for Micro Energy GmbH
- Refrigeration plant design for citrus fruits

Language
- Fluent: English
- Advanced: German (B2)
- Native: Persian