|  |  |
| --- | --- |
| Bilal Qandeel |  |
| **+1 (662) 607 – 9571 |** [**bilal.qandeel@gmail.com**](mailto:bilal.qandeel@gmail.comQ) **| Canton, MS 39046** |
| APIS | Automation | BAS | BMS | CCTV | Data Centers Engineering | DCS | Easergy | Management Systems | FDIR | FIDIC | HVAC Control | IEAS | iFLS | Industrial Cyber Security | Intercom | ISA99 | KNX | LEED | Low Current Engineering | LVVR | PA | PACiS | PLC | SAS | SCADA | Smart Grid | StruxureWare | Substation Automation |

# Profile

* A Canadian control engineering consultant with 18+ years of experience working in different fields of control and automation engineering in the US, Canada, Saudi Arabia, and Jordan.
* Educated in electrical engineering and computer science:
  + B.Sc. in electrical engineering from the University of Jordan, 2007, equivaled by Canadian WES.
  + Graduate Diploma (GrDip) in computer science from Concordia University, 2019, Montreal.
* Specialized in testing and commissioning of SCADA, Distributed Control Systems (DCS), Substation Automation Systems (SAS) using IEC 61850 protocol, and Programmable Logic Controllers (PLC) automation solutions using the IEC 61131-3.
* Supervised and/or firsthand designed, tested and commissioned a range of low current / low voltage (LC/LV) systems of different protocols, products, and vendors:
  + Experienced in building automation system (BAS) especially in lighting control (KNX/EIB and DALI), fire alarm, access control, intrusion alarm, multichannel audio systems and hotel guest management systems.
  + Integrated Building Management System (BMS) to cross-protocol, & cross-media interoperability.
* Performed regulatory telecom activities with Jordan’s governmental telecom regulator body (the TRC).

# Professional Experience

* Amazon Web Services, Canton, MS
  + Controls Engineer / Data Centers Construction and Delivery (DCCD) Feb 2025 – Present
    - Systems engineering for highly-calibrated, highly-available, and performance-intense computer spaces with advanced control scenarios, controllability, and analytics
* IKOS Consulting Canada Inc.
  + Software Requirements Reviewer with Aegis Engineering, UK Dec 2023 – May 2024
    - Systems and software requirements compliance to EN 50126-5 standard; the specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS).
    - Automating extraction and interaction with Atlassian Jira system.
  + SCADA and Integration Consultant with Metrolinx, ON Jul 2023 – Nov 2023
    - SCADA testing and commissioning activities including quality control of deliverables.
    - Third-party low current system integration.
    - Root-cause analysis of snags and correction recommendations.
* IKOS Consulting Canada Inc. *(Continued)*
  + Systems Engineering Consultant with ISC Applied Systems, QC Feb 2023 – Jun 2023
    - Systems engineering consultancy for Auto Passenger Information Systems (APIS).
    - Locomotive communication system, Public Addressing systems (PA), CCTV, LVVR, and interior electronic advertisement systems (IEAS).
* NouvLR
  + Testing and Commissioning Coordinator Mar 2020 – Jan 2023
    - Maintained GTT SCADA system’s requirements to the project’s standards.
    - Evaluated the validity of the suppliers’ offers and recommended the most favourable.
    - Validated the testing and commissioning procedures.
    - Assisted in troubleshooting VLAN communication for DNP3 SCADA protocol.
    - Assisted in enforcing the cyber security policies, procedures, and productivity scripts.
* Schneider Electric
  + DCS Specialist, Canada Nov 2016 – Mar 2018
    - Worked with SE’s proprietary PACiS, EcoSUI, PowerSCADA, Easergy, & StruxureWare.
    - Aggregated legacy protocols: DNP3, Modbus, and IEC 60870-5 into IEC 61850.
    - Gathered OT cybersecurity requirements to achieve NERC-CIP compliance.
    - Used Python scripting to interface MySQL to ICMP & conduct SCL text processing.
  + Technical Automation Engineer, Saudi Arabia Mar 2014 – Nov 2016
    - Interfaced IEC 61850 IEDs: SEL and ABB to SE PACiS and uplinked it to SCADA.
    - Implemented apps like: Energy Management Systems (EMS), iFLS (Interactive Fast Load Shedding Systems), and FDIR (Fault Detection, Isolation and Recovery System).
    - Interfaced Continuum and Modicon PLC controllers to HMI.
    - Working on a palette of automation protocols; T101, T104 and IEC 61850.
    - Implemented OT cybersecurity activities to achieve compliance w/ NERC-CIP & ISA99.
  + Senior KNX/EIB Engineer, Saudi Arabia Jun 2012 – Mar 2014
    - Post-designed, tested, and commissioned KNX automation protocol
    - Worked on DALI light control systems.
    - Rendered AutoCAD schematics for SLD diagrams and shop drawings.
    - Worked on low current integration and HVAC control.

[*~:: Earlier work experiences can be found following the QR code for my LinkedIn account above. ::~*](https://www.linkedin.com/in/bilalqandeel/)

# Memberships & Certifications

* US Green Building Council member and certified LEED Green Associate,***Feb 2015 – Feb 2017***
* Member of Saudi Engineers Council, associate engineer, ***2012 – 2016***
* Member of Jordanian Engineers Association, Electrical Engineering division, ***since 2007***
* Certified in FIDIC Redbook - International Federation of Consulting Engineers,***2015***
* Member of the Project Management Institute (PMI), ***2013 – 2015***
* KNX Association member and certified KNX Partner (ID 42599), KNX Organization,***May 2013***

# Professional Courses

* LEED 201: Core Concepts & Strategies, ***USGBC, 2013***
* WHMIS 2015, Easergy T300 Overview, ISA99 Cybersecurity, PACiS SAS, Basic Electrical Safety, M238 Industrial PLC, Andover BMS Boot Camp, NETxAutomation, Certified Energy Management Associate & 2N IP Security, ***Schneider-Electric, 2012 – 2017***
* PMP preparation (36 PDUs), ***Saudi HRD Center, PMI-(REP), 2013***
* MCSE training course – Windows 2003 Server, ***Jordanian Engineer Association, 2007***
* A+ Hardware Core, Allen-Bradley PLC,***University of Jordan, 2003, 2005***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Computer Competencies  |  |  |  |  | | --- | --- | --- | --- | | Java | ★★★★☆ | Python | ★★★☆☆ | | VB/A/S | ★★★★☆ | C/C++ | ★★★☆☆ | | LISP | ★★★★☆ | HTML | ★★★☆☆ | | MATLAB | ★★★☆☆ | Linux | ★★★☆☆ | | MS Office | ★★★★★ | Assembly | ★★★★★ | | SQL | ★★☆☆☆ | Cyber Sec. | ★★★☆☆ |  Engineering Skills  |  |  |  |  | | --- | --- | --- | --- | | SCADA/DCS | ★★★★★ | AutoCAD | ★★★★★ | | SCL/IEC61850 | ★★★★☆ | SFC/FBD | ★★★★★ | | PACiS/EcoSUI | ★★★★★ | PLC/LC | ★★★★★ | | PowerSCADA | ★★★☆☆ | μC | ★★★★☆ | |  | Languages  * Arabic ★★★★★ * English ★★★★★ * French ★★★☆☆  Personal Characteristics  * Innate leadership skills. * Can work under pressure. * Result-oriented and meticulous. * Professional public speaker. * Advanced negotiation skills. * Advanced technical writing skills. |