

# Andreas Achilleos

BA (Hons, Cantab), MEng (Hons, Cantab), FS Eng, CEng, MBA

MBA qualified and Chartered Engineer with more than 14 years' experience working as Lead Electrical, Control and Instrumentation engineer across multiple sectors (Nuclear, Oil & Gas, Water, and Rail). Experienced in managing discipline teams, stakeholder engagement, change management and implementing lean design work processes.

## CONTACT

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DOB: April 27, 1984 Nationality: Cypriot

### **COURSES**

- TUV Rheinland certified Functional Safety Engineer (FS Eng) (application of BS61508/ 61511)
- BS7671 IET wiring regulations
- DSEAR Compliance course
- Confined Spaces certification
- Water Hygiene Course
- Rail Asset Management PAS55
   Application
- CCNSG Safety passport card
- AutoCAD
- Amtech
- ABB Furse StrikeRisk Software
- AVEVA Instrumentation
- Yellow Book Rail Safety Management
- Instrumentation & Control
- Programmable Logic Controllers
- Chartered Engineer (CEng)
- 1<sup>st</sup> Prize ECITB Project Management (ACTIVE Cup) June 2015
- C++
- MATLAB
- St John's First Aid
- St John's Fire Safety Marshall

# **LANGUAGES**

- English (fluent)
- Greek (fluent)

# AREAS OF EXPERTISE

- Lead Engineer
- Functional Safety and ATEX/DSEAR
- Switchgear and Electrical Power systems modelling
- Construction and engineering projects
- Communication Infrastructure
- Design Justification Assessments
- Control systems and packages integration
- Instrumentation and Control systems
- Engineering design lifecycle stages
- Nuclear, Oil & Gas, Water, Rail

## **KEY HIGHLIGHTS**

- Chartered Engineer; Member of Institute of Engineering and Technology (IET) and the Engineering Council.
- 14+ years of lead design engineering roles across Nuclear, Oil & Gas, Water and Rail sectors.
- 8+ years of consultancy, strategic advisory and business development experience, realising new growth opportunities across various industries.
- Business strategy, cross-business integration, implementation consultant.
- Excellent communication, interpersonal and leadership skills and cultural competence.
- MoD Security Clearance 'SC'.

# **EDUCATION**

#### **Manchester Business School**

#### Masters of Business Administration (MBA), Distinction

Global programme, exploring businesses in the UK, China, Singapore, Hong Kong & Dubai, 2015-2017.

Specialising in Advanced Strategic Management, Operations Management, Supply Chain Management.

#### **University of Cambridge**

Masters – Meng (Hons) Electrical and Electronic Engineering, Merit 2008 – 2009.

Specialising in Renewable Electrical Power.

#### **University of Cambridge**

BA (Hons) Electrical and Information Sciences, 2.1 2005 – 2008.

Specialising in Information Technology.

#### The English School, Nicosia, Cyprus

A-Levels in Physics, Chemistry, History, Further Mathematics, Mechanics & Modern Greek, All A's.

11 GCSEs including English, Mathematics & Science.

# **CAREER HISTORY**

#### **Achilles Consultancy Services Ltd**

#### 2018 - Present, Contract roles

- Lead design engineer across a number of contracts for United Utilities, Southern Water and Severn Trent.

  Working on behalf of major EPC contractors. Responsible for the Electrical, Control and Instrumentation design, HAZOP and design reviews and assurance and of all detailed design documentation, change management and liaising with the supply chain, wider stakeholder, and commissioning teams. Preparation of electrical design specifications for major electrical equipment and package plant, Switchgear and Power systems modelling, including AMTECH, Lightning Risk Assessment, Telemetry Integration, Production of User Requirements Specification documentation and review of vendor documentation (i.e. Functional Design Specification, electrical panel schematics etc.).
- Consultancy services for a portfolio of HS2 projects and tender activities (Siemens, Costain etc.), including Reliability, Availability, and Maintainability design in line with BS50126.

#### **Costain Ltd**

#### 2013 - 2018

A UK Engineering, Procurement and Construction contractor, operating in the Highways, Rail, Oil & Gas, Nuclear and Conventional Power sectors, with an annual turnover of 1.7 billion GBP in 2016.

#### 2016-2018 Lead Engineer, Gas-to-Grid and Wastewater projects

- Lead engineer for the Minworth Gas-to-Grid scheme that successfully provided a new Biogas to Grid plant, that delivered 900 Sm3/hr of biomethane into the gas grid. The project also involved the conversion of existing digesters to a new pre-THP digestion process. Responsible for stakeholder liaison with Cadent, in order to achieve the necessary G17 certification.
- Lead Engineer responsible for the delivery of the Electrical, Control & Instrumentation design for more than 20 wastewater projects for Southern Water, Severn Trent and United Utilities, including Scaynes Hill WwTW; Hooe WwTW; AMP6, and AMP7 environmentally critical National Environment Programme schemes. The projects' objective was to achieve compliance with Environmental Agency permits.

Key activities included:

- Team management, supervising and checking the work by Others;
- Control and Instrumentation design, including Instrument. I/O Schedules, User Requirement Specifications, cable routing, MCERTs design, telemetry monitoring, system integration activities;
- Cause and Effect, Logic diagrams, Alarm rationalization;
- Communication Infrastructure design solutions (Fibre optic, network topologies, etc);
- Hazardous Areas risk assessments;
- Designer Risk assessments and method statements;
- Supporting programme delivery in meeting key milestones, raising Technical Queries, Early Warning Notices and change control measures, where required, in line with the project's quality and management procedures.

#### 2015-2016 Principal Engineer, Major UK Nuclear Licensee

Responsible for the daily management and project engineering management of a team of 20 engineers, to deliver a circa £700 million project to design, build and commission a nuclear plant to manage the UK's nuclear waste. Key responsibilities included:

- Managing the commissioning and handover of safety critical packages and of complex system integration activities;
- Managing project review and commercial meetings;
- Managing team's workload and utilization targets, daily management, and conducting employee performance reviews;
- Providing design assurance during detailed design stages:
   Adherence to project lifecycle stages, carrying out safety lifecycle reviews;
- Design Justification Assessments in line with industry and client standards;
- Liaising with stakeholders to ensure compliance to ISO 9001/14001 Quality management standards.

#### 2013-2015 Lead D Engineer - Oil & Gas

- Lead Engineer for the Barrow Terminal Optimisation Project for Centrica. Production of Basis of Design, Functional Safety Assessments, Instrument and I/O Schedules, Block Cable Diagrams, Package Plant Specifications and requisitions, cable routing. The role required frequent travel to various manufacturing sites to inspect and sign-off the release of all major plant equipment. Responsible for managing the delivery and ensuring the technical compliance of the fiscal metering systems. He also liaised with representatives from government agencies, advising on the proposed solution and seeking the necessary approval.
- Functional Safety Engineer across various Oil & Pipeline Agency (OPA) contracts. Production of Functional Safety Assessment Plan, Functional Safety Assessments 1/2/3, Safety Requirements Specifications etc.

#### WS ATKINS (acquired by SNC-Lavalin for £2.1 billion in July 2017)

#### 2009 - 2013

A global multidisciplinary engineering consultancy operating across the Energy and Utilities sectors.

#### 2011-2013, Lead Engineer - Major CAPEX projects for Nuclear Site Licensees

- Design Engineer for major Nuclear CAPEX projects for Nuclear licensees in the UK, with total programme cost estimated circa £1bn. The projects ranged from FEED to Detailed Design.
- Design Engineer for Solid Intermediate Level Encapsulation Facility for a Major Nuclear licensee. The objective of the project was
  to complete all of the detailed design documentation for a facility that would process the solid intermediate-level waste which arose
  during the operation of the Nuclear station. This formed part of the site preparations for the care and maintenance phase of
  decommissioning the station, where the waste has to be retrieved and processed to a passive safe form.

#### Key activities included:

- Optioneering studies to choose for the optimum technology using approved industry practices and adopting Technology Readiness Level principles;
- Delivering a wide range of project documentation, including the Sequence and Interlock Definition Document, Basis of Design, User Requirement Specifications, and safety system design (Design Substantiation Reports etc);
- Instrumentation design, including Instrument and I/O Schedules;
- Cause and Effect studies, Alarm rationalization;
- Hazardous area assessments;
- Designer Risk assessments and method statements.
- Supporting programme delivery in meeting key milestones, raising Technical Queries, Early Warning Notices and change control measures, where required, in line with the project's quality and management procedures;
- Liaising with other disciplines, both internal and with other companies within the Alliance.

#### 2009-2011, Reliability, Availability and Maintainability Consultant for London Underground

- Responsible for monitoring the performance of the Victoria Line upgrade programme and assessing such performance against contractual reliability targets.
- Produced weekly Key Performance Indicators (KPIs) and Reliability Growth Projections.
- Developed an Availability Model, based on detailed asset profile data, train service and incident response scenarios for the whole Victoria Line upgrade to simulate effects of equipment failures on system performance.
- Represented London Underground in the weekly Failure Reporting, Analysis and Corrective Action System (FRACAS) meetings
  chaired by Bombardier, assigning root cause failures and corrective actions and evaluating the effectiveness of these actions by
  modelling the system performance data.
- Received an Award for Excellence from Victoria Line Upgrade Senior Management for 'outstanding contribution to the Victoria Line reliability team and for constantly leading the way'.

#### E.R.E. Contracting W.L.L. (Doha, Qatar)

#### July-September 2008, Tender Support (University Placement)

- Tender support for the expansion of Nakilat Ship Repair Yard, Port of Ras Laffan, Qatar.
- Evaluation of BoQs, subcontractor selection and evaluation.
- Multi-disciplinary team engagement with an international element.

#### **National Guard (Nicosia, Cyprus)**

#### 2003-2005, Second Lieutenant

- Admitted as a cadet officer to the Cypriot National Guard to complete mandatory military service.
- Received leadership military training in Crete for a period of 5 months.
- Responsible for the training, discipline and well-being of circa 20 soldiers for two years.
- Promoted to Second lieutenant after 18 months of continuous service.