+44. 7808. 015613



kertvin.tugado@gmail.com



The Quays, Salford, Greater Manchester M50 3TW, United Kingdom



# EDUCATION

BSc, Electronics Engineering I Industrial Automation Mapua Institute of Technology, Philippines

The Manchester Leadership Development Programme / Alliance Manchester Business School, United Kingdom

### ORGANISATION

Project Management Institute, PMI

/ Affiliate Member
International Information System
Security Certification Consortium,
ISC2

/ Affiliate Member

# INDUSTRY KNOWLEDGE

**Manufacturing Processes** 



Heavy and Highly Regulated



# MANAGEMENT SKILLS Digital Transformation



Cybersecurity Management System



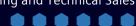
Team, Project, and Stakeholder Management



Business and Financial Management



Consulting and Technical Sales



Leadership and Coaching



Business and Growth Strategy



Organización and montización



Entrepreneurship and Ownership



**Business Process and Tools** 





PMI-ACP, CISSP (In-Progress), TÜV CySec Specialist, FSEng-SFSP

# - ENGINEERING LEAD AND GLOBAL LINE MANAGER -

#### PERSONAL INFORMATION

An agile and thought leader with 15+ years intensive years of solid technical expertise, business, stakeholder management and strong business ethics. Strong background on data analytics, engineering and project management, safety systems, cybersecurity, project delivery, consultancy, digitalization, innovation, and software development.

Highly competent and TÜV certificate holder in engineering and a certified Siemens functional safety professional level for IEC61508, IEC61511 Functional Safety (#TP22033110, SFSP23010514), and a Cybersecurity Specialist (#828/23) for IEC62443. In addition, A trained and Agile Certified Practitioner under Project Management Institute certification program PMI-ACP. In the process of obtaining ISC<sup>2</sup> Certified Information Security Professional CISSP.

Deliver outstanding governance, leadership, and management for 30 diverse teams of contractors, consultants, project and system engineers in Europe and the Global Engineering Centre in Asia Pacific for Siemens Digital Industries.

Passionate about good leadership and takes pride in building a creative, team spirited, blameless and innovative environment.

## PROFESSIONAL EXPERIENCE

ENGINEERING LEAD AND GLOBAL LINE MANAGER Siemens AG, 2019 – Present FUNCTIONAL SAFETY MANAGER in PROJECT Siemens AG, 2020 – Present PRODUCT & SOLUTION SECURITY OFFICER

Siemens AG, 2020 – Present

- Preparation and review of engineering project proposals and technical compliance in focus overall solutions engineering delivery.
- Negotiated and perform project and risk controls to the assigned projects, and managed resources, schedule, workload, and key performance.
- Lead the consultation and workshops in focus with cybersecurity standards, compliance, and frameworks (IEC62443, IEC62351, NIST, NIS, IT/OT Convergence) focusing on the energy industry.
- Spearhead and own the functional safety engineering management, cybersecurity, and lifecycle activities on critical infrastructure projects specifically on energy, chemicals, and power generation industry.
- Contribute to overall business by managing profit and loss P&L's and increase in margin, change order management and value-added selling strategy for projects and sales.
- Administer in rolling out of business goals and targets to projects, engineering, and various stakeholders.
- Lead the improvement of engineering processes, tools, application, and standards by use of digitalisation tools and up to date technologies.
- Lead, coach and manage a team of engineers locally and across global engineering centres regions.
- Ensures that knowledge transfer is always carried out across the team and knowledge on the new technologies are always up to date.
- Partake in selection, and development of global engineering centres.

TECHNICAL SKILLS PM @ Siemens Project Management Siemens Process Control System PCS7 and Process Modelling using SIMIT Platform Siemens Opcenter Execution Pharma MES Siemens Plant Engineering **Software COMOS** Siemens PLM and Manufacturing **Operations Software** Mendix Low Code Application Development Platform Cyber Security and Industrial Security Functional and Process Safety Python, VB6, C++ and Visual Studio SQL and Oracle Database Cloud and Edge Computing Software Development Life Cycle Agile, DevOps and Scrum

### CERTIFICATIONS

Siemens People and Business Management / Siemens AG

Framework

Siemens Leading the Digital Business Transformation / Siemens

> Functional Safety Engineer and Professional / TÜV SÜD

Cybersecurity Specialist on Security Risk Assessment / TÜV Rheinland

Siemens Process Control System PCS7 / Siemens AG

> Siemens Opcenter Execution Pharma / Siemens AG

PMI-ACP / Project Management Institute

#### **BUSINESS AND TECHNICAL MANAGER**

Plant.IT Process Automation Solutions, Founder 2017 - 2019

- Review and budget allocations, financial statements, project expense and managing cost.
- Analyze, approve, and recommend approval of all change requests, orders, invoices, and payment applications.
- Provide leadership, coaching and guidance to the team of engineers, contractors, and staff members.
- Perform administrative functions such as reviewing and writing reports, approving expenditures, enforcing rules, and making decisions about the purchase of materials or services.
- Spearhead the hiring and selection process.
- Develop and bridge internal and external stakeholders.
- Analyze current trends and technologies and market demands, plan and assess the feasibility of projects.

#### **ENGINEERING MANAGER**

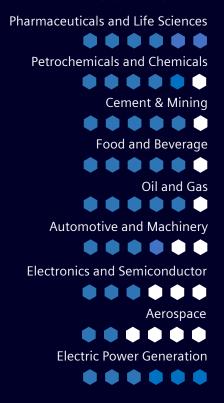
CMR Group, Co-Founder 2012 - 2017

- Provide leadership, coaching and guidance to the team of engineers, contractors, and staff.
- Ensures that project is within budget and able to target the project timeline.
- Discuss, review and layout project specifications, timelines, and schedules.
- Review, approve and modify designs and Develop cost estimates and proposals.
- Analyze key performance indicator, continuous improvement and development plan for engineers and staff.
- Analyze market demands and develop business growth strategy for sales and technical team.

#### RECOGNITION AND ACHIEVEMENTS

- Successfully manage, lead, and deliver numerous complex full lifecycle projects, approximately ~£25M in total revenue
- Champion for project delivery, execution and controls contributing to improved overall business targets and margin by ~20%
- Champion for people leadership, global collaboration, engineering, technological and stakeholder management.
- Champion as a functional safety manager and cybersecurity specialist in projects spearheading critical infrastructure specifically on energy, chemicals, and power generation.
- COMOS region champion for the solutions business and successfully speared the collaboration for the conceptualization, development, and release of COMOS tools and additional plug-ins.
- Effectively increase project engineering execution and delivery resulting in increase in profit margin by ~30%
- Champion for digitalization and innovation technological development for the engineering delivery and business
- Effectively establish value-added delivery and sales to projects, taking leverage of opportunities resulting in additional increase in profit and sales
- Champion for people leadership, global collaboration, engineering, technological and stakeholder management

#### INDUSTRIES



# ENGINEERING SKILLS

Good Automated Manufacturing Practice



. . . . . . .



Industrial Communication and Protocols



3<sup>rd</sup> Party Distributed Control System



International Framework and Regulatory Standard

System Integration

Blueprints and Architecture

Design and Concepts



Solutions and Software Development

•••••

Lean Start-up and Six Sigma



Discrete, Process, Continuous and Batch



#### SELECTED BUSINESS PROJECTS

- Regional and global contributor for developing and improving engineering processes, best practices and methods, execution of local business strategy and developing high level of customer relationship.
- Authored, adapt, manage, and maintain functional safety management lifecycle documents to suit the Siemens UK engineering and delivery according to IEC61508 and IEC61511.
- Assigned to lead and manage the full functional safety lifecycle from proposal, consultancy, engineering management and delivery.
- Task and assigned by the business and one of the members of the committee on certifying and recertifying TÜV SÜD cybersecurity and functional safety blueprints based on IEC62443, IEC62351, NIST, NIS, IEC61508 and IEC 61511
- Own and lead the project and solutions audits, consultancy, and engineering management of critical infrastructure projects to comply with standards such as IEC61508, IEC61511, IEC62443 and EEMUA 191
- Regional contributor for the development, update and release of validated design, test execution and functional documents on topic of Cybersecurity, COMOS, PCS, Integration Services and MES.
- Locally spearhead and global contributor for raising the global engineering and resource center development for Process Control System PCS and Manufacturing Execution System MES
- Regional and global contributor for developing and exploring innovative ways for engineering delivery and subject matter expertise knowledge sharing.
- Evangelist for the use of existing, new, and upcoming technologies such as Artificial Intelligence, Blockchain, Machine Learning, Edge, Cloud, Digital Twin, Industrial IoT and Modular Engineering geared towards the advancement of Industry 4.0

### SELECTED TECHNICAL PROJECTS

- Briar Chemicals: Biotechnology Complex Chemicals Facility Distributed Control System, Siemens SIMATIC Process Control System PCS7 Batch Control, Safety SIS Control, Industrial Cybersecurity and SIMIT Digital Twin
- SSE Thermal: Underground Gas Storage Facility, Siemens SIMATIC Process Control System PCS7, Safety SIS Control, Industrial Cybersecurity and Consultancy Services
- Vital Energi: Energy Conversion Integrated Control System, SIMATIC Process Control System PCS7, Safety SIS Control, Industrial Cybersecurity and Process Historian
- Wood plc: National Grid, Siemens SIMATIC Process Control System PCS7, Safety SIS Control, Industrial Cybersecurity and SIMIT Process Simulation
- Energos: Renewable Energy Advanced Conversion Facility Distributed Control System, Siemens SIMATIC Process Control System PCS7, Safety SIS Control, and Industrial Cybersecurity
- Shell & Chevron: Terminal Plant Distributed Control System, Siemens
   SIMATIC Process Control System PCS7, Safety SIS Control, Process Historian, and Industrial Cybersecurity
- Petronas: Floating Liquified Natural Gas Offshore Integrated Control and Safety System, Siemens SIMATIC Process Control System PCS7, Safety SIS Control, and Industrial Cybersecurity
- Equinor Statoil Mariner Topside and Odfjell Drilling UK: Siemens Control System Engineering Management and Services, Commissioning and Offshore Support