



## **SKILLS & EXPERTISE SUMMARY**

- Design and construction of Large-scale multi-project, multimillion-dollar facilities. Including LEED-certified, Historical, and Research facilities.
- Industry leader in Smart campus and IoT technology implementation.
- Strategic leadership, master planning & forecasting for asset management.
- Corporate, operating, and change management procedures to ~~at~~ achieve performance excellence.
- Proficient in maintenance practices; Reliability Centered Maintenance (RCMII), Total Productive Maintenance (TPM).
- Experienced with Enterprise software such as Siemens Desigo CC, JCI Metasys, IBM Maximo SAP, JD Edwards, TMA, and School dude.
- Managing the professional and technical workforce (labor unions).
- Solving complex HR issues, including union contracts negotiation.
- Proficient in outsourcing personnel projects.
- Implementing lean Six Sigma principles achieving cost reductions and performance improvements.
- Specialist in driving continual improvement via operational excellence based on Kaizen principles.
- Experienced in OSHA training.
- Experience with projects to increase participation of diverse and minority communities
- Bi-Cultural with fluency in English, Spanish, and Italian

## **PROFESSIONAL EXPERIENCE**

### ***Vice President and Chief Facilities Officer (+200 Employees, \$90 M) July 2021 to Present*** **Community College of Allegheny County (CCAC) – Pittsburgh, Pennsylvania**

- Serve as the Vice President and Chief Facilities Officer, a Cabinet and Executive Leadership Team member reporting to the College President and various committees of the Board of Trustees.
- Provide senior leadership, engineering direction, goals, and strategic vision for the full spectrum of facilities management activities, including:
  - Campus Master planning, new construction, renovations, contracts management and negotiations, capital planning & development, facilities project design & renovations, Space management, Real estate management, Physical plant operations & maintenance including deferred maintenance and life cycle. Utilities system master plan, including Solar, and energy procurement, Environmental health & safety compliance, parking & transportation services, emergency management, public safety, and security forces (+ 65 officers).
- Manage an operating budget of approximately \$90 million for new construction, renovations, and operations. Lead a workforce of over 200 personnel, professional, outsourced, and labor union workers.
- Design and construction of a new LEED Silver building to host the Workforce Development programs. (60,000 sq ft, +\$60 Million) and Full renovation of an 1896 Historical Building (20,000 sq ft, \$15 Million)
- Campus master plan revised to reflect the new operational conditions after COVID-19.
- Creation of the executive project for the new College of Nursing project (112,000 sq ft), to centralize the nursing and allied health programs in one campus.
- Implemented the largest SMART Campus community college project in the USA based on the Siemens IoT Enlighted system and the use of artificial intelligence to compensate for the lack of HVAC and Electricians employees, achieving energy savings of about 30%, visibility of space utilization in real-time, +\$400K in incentives by the electric companies, and others.
- Develop strategies and implementation of plans for the operation of all facilities including four campuses and three centers across Allegheny and neighboring counties spanning about +1.8 million square feet and +600 acres.
- Creation of the new Campus Police command center to monitor all campuses and centers 24/7 including +60 security officers, +900 cameras (Avigilon), Access control, and IoT smart campus operation.
- Public safety master plan updated to adapt to provide a safe environment in which to learn and work including crime prevention programs and incident management.
- Creation of a proposed reorganization to unify 4 campuses and 3 centers and create a ONE College organization. Reduce the operational cost and create a more streamlined and effective approach to facilities management, including implementing a new ERP, realigning key positions, and developing Key Performance Indicators to increase the function of the facilities department.
- Installation of a 543-kilowatt solar power project without any expense to CCAC (\$7M+) and the creation of the plan for all other 3 campuses
- To create a more inclusive environment for all individuals, I created a couple of events to support the certification of contractors and services as a minority, women, and disadvantaged business enterprise (MWDBE), including the translation of procurement guidelines in Spanish for the Latino community.

**Assistant Director for Research Support and Operations (+55 Employees, \$6.5 M) Aug 2012 to July 2021**

**Assistant Director for Research Support (+15 Employees, \$1.5 M) Jun 2011 to Aug 2012**

**University of Texas at El Paso (UTEP) R1 status. - El Paso, Texas**

Design, construction, operation, maintenance, and certifications of Historical Buildings, High-Tech/High-Risk buildings, including Biosafety Level III laboratories, Cleanrooms, vivarium, and others. Utilities management, HVAC Systems, Thermal plants operation, 3.6 Million Chilled water storage tank, Campus-wide Access Control, Fire Alarm systems (Simplex), Generators, and Research equipment. Managed an operation of over 55 professional, technical, and non-technical personnel. Lead, train and develop the team to operate and maintain 90 buildings (5.2M sq. ft.) on campus and remote locations, a \$500M Physical plant, \$108M annual research expenditures, and \$50M in research equipment.

- Co-designer and accountable for the commissioning of several research facilities:
  - **Interdisciplinary Research Building** (+\$109M), including Vivarium, BSL2 and clean rooms class 100.
  - **Bioscience Building** (+75 M), BSL3 and BSL2 labs, Vivarium(AAALAC accreditation)
  - **College of nursing** (\$85M), **Chemistry and computer science** (\$77 M), **Engineering Clean rooms** (+15M) Class 100 and Class 1000 labs for electronics application.
  - **Miner Canyon student housing (\$23M)** apartments for +350 students.
  - New main campus Medium voltage electrical systems (N+1), biometrical access control, RFID asset management, high-security areas for different government agencies, etc.
- Implemented several projects and new operational methodologies: i.e. achieved an annual average of 40.4% in Campus utilities expenses reduction (-\$4.25M/year). These projects transformed UTEP in the most efficient (BTU/ft<sup>2</sup>/Yr). Campus among the UT System. While growth +800K sq. ft .
- Negotiated several utilities contracts with EP Electric and received +\$370K in utilities rebates.
- Design and implemented the largest Siemens IoT Enlighted system in the US, in 35 buildings with over 120k points of control, achieving savings for over \$1.52M with \$0 cost of initial investment and not using a performance contract as the strategy.
- Contract management for Research equipment and services, 6,500+ pieces of equipment and \$50 million+ in assets. Reducing downtime and time response, and generating savings of +\$800K/yr.
- Established the strategic plan for the new Operations-Maintenance centered organization with a Research support function (High reliability) and a Sustainability vision for the University to achieve a Research 1 University status.
- Designed and implemented the BSL3 & Vivarium maintenance plan for certification by the AAALAC
- Records keeping for auditing purposes and to comply with the FDA, NSF, CDC, and other government and private agencies.
- Implemented a new maintenance system based on the RCMII philosophy for Research equipment to increase operational reliability
- Design and Implemented the new Control Centers that monitor campus critical areas, equipment, and operations 24/7/365 for immediate and emergency response. Including Energy dashboards, CCTV, Fire alarm systems, HVAC Systems, Radio Frequency ID systems, and biometrical access control.
- Improved customer service process by closing work orders: From 60 days to an average of 3 days.
- Developed several SOP: i.e., Access control, Bioscience and research operations, and Energy plants.
- Generated training programs for the employees like safety program (OSHA 10), 5'S mechanical rooms, vibration analysis, supervisor's toolkit, teamwork, PMP, etc.
- Implemented the Maintenance Management Software (TMA) and Maintenance Operational strategies, including the definition of the operational KPIs and goals.
- Migration of the radio communication system from 800 trunking to the Digital 900 Mhz spectrum and managed the Mexican government complaints together with the FCC.
- Implementation of the COVID19 clinics, including the laboratories for testing and vaccines storage in coordination with the city of El Paso, TX.

**Facilities Services Director, (+210 Employees, +\$10 Million Budget)**

**May 2008 to May 2011**

**Universidad de Monterrey (UEM) - Monterrey, Nuevo León, México**

- Collaborated with the architect and the engineering firms to design MEP systems and applied finishes for the LEED silver Design School and research building: "Gate of Creation". Designed by Tadao Ando, The Pritzker Architecture Prize winner. (\$70 Million, 142,000 sqft)
- Responsible for the University's Master plan 2010-2020 revision with a sustainability approach.
- Developed and implemented the campus maintenance system (+2M Sqft.), including 4 peripheral campuses and student housing, through RCMII Methodology, design of Administration Software (IBM MAXIMO), and maintenance operational processes for HVAC, Electric, Building Maintenance, Access controls, Plumbing, Elevators, Warehouse, Grounds, Custodial and Labor shops.
- Designed and implemented several energy-saving projects that achieved savings of +\$700,000/ yr.
- Winner of the "CO<sub>2</sub> and Energy Reductions" Sustainability award from the State's Governor.
- Nominated for "Premio Nacional de Ahorro de Energia Electrica" by the National Energy Secretary for a national competition that involved energy-saving projects in 2010, (18% kW reduction).
- Established a 5 yr. strategic plan for the Maintenance department with a Research support function.
- Restructured the campus maintenance system and achieved a 115% improvement in technical operative productivity and a 300% decrease in fail response times.
- Restructured the maintenance budget with a new working methodology in 2009. Saved over \$1M/Yr., starting in 2010.
- Designed, implemented, and commissioned the BSL<sub>3</sub> labs and clean rooms.
- Developed projects with the National Water Commission that saved over \$400,000/Yr.
- Collaborated in the SACS certification process, creating, and implementing Internal Policy and Action Procedures along with other business plans for the maintenance department.

**Operations Manager Trainee (Staff position)**

**October 2006 to January 2008**

**CEMEX – Monterrey, Nuevo Leon, Mexico**

- To become a manager, completed an Intensive Training and Development Program (Entry Level Operations Senior) for Maintenance, Production and Quality.
- **Project Management:** Created a new operational process to manage the turnovers of the 60 main kilns and +100 crude mills in different plants across Mexico. This included the Format design, programming of the tasks, control, follow-up, and reporting. Some of these construction projects included the management of over 1,000 people, +3,000 tasks, and a total cost of up to \$10 Million.
- Designed work programs and corrective actions for material transportation systems and dust collectors at the plant in Estado de Mexico: reduced dead times at the mills due to a 25% shortage of materials, modified the feed of mills to diminish calcium saturation variability by 700%, and improved cement resistance.
- Collaborated in the follow-up, analysis, control, and predictions of the advances in the RCMII analysis groups for the 15 plants in Mexico from 2007 to 2009.
- Created the "Cemex Master in administration and maintenance" degree program at UniversidadRegiomontana for CEMEX executives, to unify the criteria among plant maintenance managers in Mexico

**Plant Engineer (+45 Employees, \$2.5 Million Budget)**

**March 2000 to October 2006**

**ACEREX (Hylsamex - Worthington Steel) - Monterrey N. L.**

- Managed the CAPEX improvement projects for the plant, engineering, and maintenance.
- Managed the Mechanical, Electrical, Plumbing, Electronics shops and Warehouses.
- Coordinate maintenance tasks with the Plant operation: Supply Chain, Production, and Quality.
- Implemented several projects like The TPM maintenance system in SAP for all the production and wrapping lines. Kaizen projects to improve the productivity of production lines. Energy savings projects and power quality improvement (P.F, THD%, kW). Improve the PLC's and SCADA Hardware and Software to monitor line failures and production downtimes in real-time.
- Participate in the implementation of the quality assurance program ISO/TS 16949:2002 and ensure business continuity as an automotive supplier.
- Created the radioactive, MEP, and electronics equipment maintenance plans that achieved 95% equipment availability monthly.

## EDUCATION

### **Certified Energy Manager (CEM) License: 134844**

- Association of Energy Engineers Certification **2018**  
Denver, Colorado

### **Graduate School**

- Master's in business administration (MBA), UTEP. (GPA 3.9) **2013- 2014**  
International Research Course in Hong Kong, China, and Tokyo, Japan
- Graduate Certificate Quality and Innovation in Services, UDEM. (GPA 4.0) **2009-2010**

### **Undergraduate**

- Electronics and Automation Engineering, UANL (GPA 3.8). **2000-2005**  
Recognitions: "Group of 100" Award for 99.2% grade-point average.

### **Associate**

- Automation Controls and Instrumentation Tecnologo, C.E.T.I. (GPA. 3.7) **1996-2000**

## LANGUAGES

**English and Spanish:** Advanced; **Italian:** Intermediate; **German:** Basic

## PRIZES AND RECOGNITION

**Speaker at RSC 2023 Maryland:** "Smart Data for Energy Optimization"

**Speaker at EACUBO 2022 New York City:** "Roadmap to Smart, Healthy and Sustainable campus"

**Mid-Atlantic Sustainability Champion 2022 :** Award for energy and CO<sub>2</sub> reductions by JCI

**President of the Texas Energy Managers Association 2019-2020:** Southwest region.

**Speaker Siemens Technology 2020:** Main speaker at the Annual Siemens Expo: Smart Campus and IoT

**Siemens Engineering annual conference 2017: Speaker,** Challenges of implementing Internet over Things and Artificial intelligence in obsolete buildings.

**APPA President Award 2015 recipient:** Highest recognition from the APPA president for the Mexico-USA-Canada Initiative

**APPA Professional of the Year 2013**

**IBM Best Practices for Latin America 2011:** Implementation of the Maintenance System in UDEM.

**Government of State of Nuevo Leon 2011:** Energy and CO<sub>2</sub> Reduction

## PROFESSIONAL TRAINING

### **High-containment Laboratory Operations and Maintenance II**

UCI National BSL-3 Training Program

### **Green Belt of Six Sigma Methodology**

Six Sigma consulting group

### **Project Management**

Bridge Gap Consulting

### **Customer Service and Leadership**

Dale Carnegie training group

### **Vibration Analysis**

Machine Dynamics, Inc.

### **Testing, Adjusting and Balancing and DDC Controls**

University of Wisconsin-Madison

### **Fundamentals of Bio-containment Operations and Maintenance**

World Biohaztec in Texas

### **Emotional Intelligence and Coaching**

American Management Association, Monterrey

### **Reliability Centered Maintenance II**

Ellmann-Sueiro & Asociados, México City

### **Industrial Safety, Clarity, & Safe Start**

COASTAL, Monterrey, Mexico

### **Control and Automation**

Schneider Electric Institute

Mexico City