1901 E Warren Avenue
Victoria, TX 77901

home phone: (361) 571-0335
work phone: (361) 572-1523
martin.cantu@suddenlink.net

MARTIN CANTU

My career is in the field automation and control engineering. I'm currently employed with E.I DuPont at the Victoria Texas site. This facility produces a wide range of high quality polymer product grades and is integrated into many different applications. Some of my responsibilities at this site include Distributed Control Systems (DCS), process modeling though the use of simulators, instrumentation, analyzers, communication, hydraulic analysis, layers of protection analysis and steward of Safety Instrumented Systems (SIS).

EDUCATION

Texas A&M University
College Station, TX

- Bachelor of Science in Electrical Engineering
- Concentration: Controls and Power
- Date of graduation: May 1999

WORK EXPERIENCE

2004 – Present
Automation & Controls Engineer
DuPont Packing & Industrial Polymers
Ethylene Copolymers
Victoria, TX

2011 – Present
Adjunct Instructor (Electronics/Instrumentation)
Victoria College
Technology Department
Victoria, TX

1999 - 2004
Electrical & Instrumentation Engineer
DuPont Nylon
Adipic Acid
Victoria, TX

1998
Internship Electrical Engineer
CPL Utilities Co.
Victoria, TX

EXPERIENCE / TRAINING

AUTOMATION & PROCESS CONTROL:

Systems - Siemens PCS7, SIMIT, ABB Bailey Infi 90, Allen Bradley PLC, iba.

Applications - Fuzzy logic, PID controllers, Nonlinear and Adaptive controls, Aspen Tech Model Predictive Controls, Turbo Modular Dynamic Simulation, Lab feedback PI controls, MODBUS communication, Profisafe/Profibus communication, Alarm Management.

MEASUREMENT & ANALYSIS:

Flow – magnetic, coriolis, thermal, orifice, portable (ultrasonic), vortex

Level – differential, capacitance probes, radiation

Temp – RTD, thermistor, thermocouples

Analyzer – colorimetric, pH, conductivity, oxygen, gas detectors, GC, FTNIR

SAFETY:

Trained in …

- Process Safety Management (PSM –14 elements)
- Process Hazards Analysis (PHA – Review & Consequences)
- Probability of Failure on Demand
- Layers of Protection Analysis
- Safety Instrumented Systems
- Fault Tree Analysis
- Root Cause Failure Analysis

SIX SIGMA:

Greenbelt Certified

PUMPS:

Centrifugal
Metering pumps & dampeners

ELECTRICAL METERS/RECORDERS:

Multi-meter/Process meter
Oscilloscope
Power Meter
High Speed Data Acquisition
Profibus & Modbus Analyzer (RS232/RS422/RS485)

VARIABLE SPEED DRIVES:

Eddy current clutch
Frequency drives

VIBRATION:

Proximity, velocity, acceleration
Magnetic switches
Bently Nevada & Prognost (Systems)

FLUID MODELING:

AFT Fathom
AFT Arrow