Yuyang Qin

King of Prussia, PA - Email me on Indeed: indeed.com/r/Yuyang-Qin/90cf6362baa68d6a

Willing to relocate: Anywhere
Authorized to work in the US for any employer

WORK EXPERIENCE

Junior Engineer Intern

ANSTEEL GROUP CORPORATION - Anshan, CN - 2013 to July 2013

• Understand process of metallurgical industry and typical control system structure, familiar with how industry equipment works, learn more about management, technology and control status of modern industrial enterprise.
• Analyze drawings of component, determine process routine, calculate parameters for current status in the coordination, write CNC program for cutting component.

PROJECTS

Object pursuit using sonar sensor based on Arduino Spring 2015
• Design an object pursuit and park program for car based on Arduino.
• Assembling components including battery, chip, sonar sensor, and car framework.
Traffic light control logic for crossing Fall 2014
• Design a traffic light logic for crossing between a farm road and a highway using VHDL.
• Define input and output, analysis each status, design state program, generate state table, determine possible states for machine, encode states and outputs into a binary code, realize logic to implement functions for states and outputs.
Face detection and recognition Spring 2015
• Implement the Karhunen-Loeve (KL) transform for face detection and recognition.
• Generate matrix based on sample images, calculate the characteristics of the face using the singular value decomposition, get coordination for Eigen face space for each sample image, categorize using nearest-neighbor method.
Implement a JPEG encoder Spring 2014
• DCT, Quantization, Zig-Zag ordering and encoding with Huffman table.
• Evaluate the performance and achieve the compression ratio with 1:4.
Design a control system for double inverted pendulum Spring 2013
• Make a double inverted pendulum keep standing after the pendulum raised.
• Establish mathematical model, calculate open-loop characteristics with MatLab simulation, design controller and add it to close-loop, adjust parameters using linear quadratic optimal (LQR) method based on record of MatLab simulation.

EDUCATION

Master of Electrical and Computer Engineer in Electrical and Computer

UNIVERSITY OF ILLINOIS AT CHICAGO - Chicago, IL
May 2015

Bachelor of Automation in Fluent

NORTHEASTERN UNIVERSITY - Shenyang, CN
June 2014

SKILLS

C (4 years), C++ (1 year), VHDL (2 years), SQL (Less than 1 year), Matlab (4 years)