Hong San, Wong

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OBJECTIVE

Seeking an Entry-Level Position within the RF, DSP and Communication Field

Current UCI graduate student in Electrical Engineering (System & Signal Processing) with experience in Filter design, Communication system simulation, antenna design and image processing in C.

EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE, CA **(M.S) Electrical Engineering,**   Exp Grad: 7/2015   GPA: 3.4

- **Concentration**: System & Signal Processing (Communication)
- **Relevant Courses:** Communication Systems [(Modulation Theory: QAM, PAM, etc); Equalizer Theory (Linear Equalizer, Zero-Forcing/MSE Equalizer, Decision Feedback Equalizer; OFDM; Spread Spectrum)], Antenna Design, Digital Signal Processing [FIR/IIR Filter Design; Sampling Theory; Projection Theory]; Industrial and Power Electronics [Power Switching Devices, PWM Method, Smith Chart and Impedance Matching]
- **Activities:** IEEE (Industrial Relations Chair), Beall Student Design Competition (Product Development)

UNIVERSITY OF CALIFORNIA, IRVINE, CA **(B.S) Electrical Engineering,**   Grad: 7/2013   GPA: 3.05
- **Concentration**: Solid State Devices & Signal Processing

SKILLS

PROGRAMMING AND SOFTWARE: C/C++, Java, Linux, MATLAB, Simulink, PSpice, HFSS, Microsoft Word, Excel, PowerPoint
LABORATORY AND CIRCUITS: Smith Chart, Spectrum Analyzer, DMM, Power Supply, Oscilloscope

EXPERIENCE

UNIVERSITY OF CALIFORNIA, Irvine, CA   **Graduate Researcher,** 02/2014 (Ongoing Research)
Research on CE-OFDM theory and develop algorithm to increase the information package limit per channel.
- Summarize research paper in OFDM area and conduce simulation with MATLAB.

DEIPHI DISPLAY SYSTEMS, Costa Mesa, CA
Engineering firm providing fast food drive thru systems solutions.   **Electrical Engineer Intern,** 01/2013 to 04/2013
Design power and signal distribution (through PoE, PoE+, LTPoE++) device to minimize AC power outlet usage.
- Worked under senior electrical engineers to design power converter.
- Build cost estimation and market validation (Market need, current competition).
- Research on PoE, PoE+, LTPoE++ standard and performance

UNIVERSITY OF CALIFORNIA, Irvine, CA   **Researcher, (Prof Glenn Healey)** 01/2013 to 04/2013
Research on Face Recognition with Hyerspectral images with Gabor filter features algorithm.
- Features Extraction from hyperspectral images.

HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY   **Summer Researcher,** 07/2013 to 10/2013
Research on high efficiency nanostructured solar cell with aluminum anodization technology. ***Key Contributions:***
- Resolved the challenge of constructing tall nano-spike by controlling etching windows in solar cell development.
- Preformed nano-dot imprint on aluminum base and solar cell optical behavior examination.

PROJECTS

Image Subsampling and Interpolation
Developed a C program to subsample and zoom images in Linux environment to demonstrate image distortion caused by subsampled image.

Linear Array Antenna Simulation
Studied the influence on radiation pattern, solid angle and directivity due to self-coupling and mutual coupling and size of the linear array.

Patch Antenna CAD Design
Design a patch antenna with HFSS design tool. Studied the antenna gain, directivity and radiation pattern.

LMS / Normalized LMS / RLS Simulation (Adaptive Noise Cancelation Simulation)
Simulated and compared performance of various adaptive equalizers used in communication systems with Matlab.

AWARDS

1st Place at StartUp Weekend Product Development Competition 2014
Developed a Smart sprinkler system that integrate weather data feed from the server. Provide solution to watering plants (i.e. Best time, amount of water base on plant type, remote control through smartphone)

2nd place at IEEE SoC (OC) Student Design Competition 2012
Designed a 3D solar cell with nanostructures on each surface for high light trapping efficiency