YIN FUNG KHONG

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Emerging Computer Engineer with hands-on experience in image processing, FPGA/ASICs digital design and data analysis with years of leadership experience, integral to success of various projects. Self-motivated and dependable while achieving high performance with minimal supervision.

EDUCATION

California State University – Northridge (CSUN) ***Spring 2019***
- **M.S.** in Computer Engineering ***(3.95/4.0 CGPA)***
- Distinction Award, Outstanding Graduate Student

California State University – Northridge (CSUN) ***January 2018***
- **B.S.** in Computer Engineering ***(3.94/4.0 CGPA)***
- Summa Cum Laude (First Class Honors)

EXPERIENCE

Graduate Assistant | ***CSUN Dept of Electrical & Computer Engineering*** ***Sept 2018 – May 2019***
- Graded assignments and lab reports, and tabulated grades accordingly.
- Assisted in lab, answering questions related to homework assignments and laboratory experiments.

Graduate Intern | ***Intel Corporation (iCDG)*** ***June 2018 - Aug 2018***
- Designed and developed C# windows application to expedite test data analysis, by incorporating JMP and various package managers, which the calculations and graphs are populated into an excel sheet accordingly.
- Implemented Machine Learning for pattern detection to predict the distribution type of the test data.

SKILLS

Multilingual - fluent in *English, Mandarin, Bahasa Malaysia* and conversational in *Cantonese*

Programming - *VHDL Verilog/SV MATLAB Java Python ARM C/C# Wordpress*

CRLA International Mentor Training Program Certification (IMPTC) – Certified Mentor Level I

PROJECTS

A Novel Approach for Efficient Implementation of Nucleus Detection and Segmentation Using Correlated Dual Color Space (IEEE SMC Conference) ***Apr 2019***
- Researching an efficient yet accurate algorithm in blood cell segmentation in microscopic blood images using digital image processing techniques, to improve and accelerate the diagnosis of different hematologic disorder.
- The research proposes a novel technique that involves the RGB and CMYK color spaces.

Blood Cells Detection using Circular Hough Transform in MATLAB ***Dec 2018***
- White Blood Cells detection and calculation on color blood test images.
- Morphological operation to process and filter image noise for further handling.
- Translated concept for implementation on real-time detection on FPGA.

Multi-Clock and Timers using ZedBoard Development Board ***Nov 2017***
- Implemented FSM on the FPGA for chess clocks and timers with error handlings.
- Added Seven-segment displays for two user's countdowns, with on-board LEDs.
- Implemented LFSR for pseudo-random number generation for Fischer chess clock.

Audio Codec using ZedBoard SoC Development Board ***May 2017***
- Integrated PL and PS of the board to implement functionality for audio streaming.
- Added frequency filtering and tones to the audio streaming output.
- Implemented onboard display and switches for better user experience and control.

INVOLVEMENTS / ACHIEVEMENTS

President, *Tau Beta Pi Engineering Honor Society* ***May 2017 – May 2019***
President, *Leaders in Engineering and Computer Science - Student Council* ***Nov 2017 – May 2019***
President's Volunteer Service Award (PVSA) ***2016, 2017, 2018, 2019***
Best Leadership Award, *Tau Beta Pi Engineering Honor Society* ***2018***