# YIN FUNG KHONG

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## SUMMARY

Highly motivated, passionate and ambitious young professional demonstrated success and dedication in academics and leadership. Detail-oriented, attentive and dependable, completed every assigned tasks and responsibilities in a timely manner with genuine commitment to quality and satisfaction with great engineering ethics and disciplines. Proactive leader and team player in organizations and extracurricular activities, integral to success of numerous projects and improvement initiatives in student affairs, both university and college level.

## 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)

**North Seattle College (NSC)**, *Seattle, WA* ***June 2015***
- Associate of Science (A.S) ***(3.97/4.0 CGPA)***

**Dean's List** - 2 Quarters & 7 Semesters
**President's List** - 4 Quarters
**Achievement Scholarship** – 1 Quarter
**Merit Scholarship** – 2 Quarters

## SKILLS / CERTIFICATION

**Programming –** *VHDL Verilog/SV MATLAB Java Python ARM C C# JMP Wordpress*
**Multilingual -** fluent in *English, Mandarin, Bahasa Malaysia* and conversational in *Cantonese*
**CRLA International Mentor Training Program Certification (IMPTC) –** Certified Mentor Level I

## WORK EXPERIENCE

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

**Peer Mentor | *CSUN Mentorship Program*** ***Jan 2017 – May 2019***
- Impacted assigned mentees positively by serving as a social and academic role model.
- Helped set goals and offer support through referral of resources available on campus.
- Fostered a supportive environment with constructive feedback on performance.

**Student Coordinator | *CECS Mentorship Program*** ***Jan 2019 – May 2019***
- Identified the concerns and needs of the students within the College of Engineering and Computer Science, in and outside of the classroom.
- Structured and piloted the program to improve students learning outcomes within the program**.**
- Communicated with the student mentors to discuss mentees' concerns and brainstorm solutions.

**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.

**Marketing Photographer** | ***North Seattle College*** ***Nov 2014 - July 2015***

- Liaised with the marketing department to visualize and design marketing materials.
- Created and photographed college's community and events based on the marketing needs.

## PERSONAL ACHIEVEMENTS

**Matador Volunteer Service Award** ***2019***

- Accumulated total of 350 hours of community services, including outreach, Matador Day of Service, campus clothes drive, beach cleanup, Cesar Chavez Service Fair and etc.

**President's Volunteer Service Award (PVSA)** ***2016, 2017, 2018***

- Awarded Gold Awards for three consecutive years of active involvement.
- Accumulated over 100 hours of community services on and off campus each academic year.

**Best Leadership Award,** *Tau Beta Pi Engineering Honor Society* ***2018***

- Dedicate on average of 8 hours for officers' coordination, event planning and outreach.
- Created a new chapter website for members recruitment and chapter's news and updates.
- Invited and involved faculty members in chapter development and improvement.

**Automated Music Box using SoC and Image Processing *(Project)*** ***Nov 2017***

- Awarded second runner up in ECE Senior Design Project Presentation Competition.
- Camera capture of music sheet, notes detection using image processing techniques.
- Audio processing using audio codec and I2C protocol to remap and reproduce melodic sound.

## PROJECTS

**A Novel Approach for Efficient Implementation of Nucleus Detection and Segmentation Using Correlated Dual Color Space (IEEE SMC Conference)** ***Apr 2019***

- Researches an efficient algorithm for blood cell segmentation in microscopic blood images using digital image processing techniques, to improve and accelerate the diagnosis of different hematologic disorders.
- Proposes a novel technique that exploits the correlation between the RGB and CMYK color spaces, and yields segmented nuclei that are virtually congruent to the nuclei in the initial image.

**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.

**32 Bit Binary Floating-Point Adder Using IEEE 754 Single Precision Format** ***Nov 2016***

- Implemented floating point adder in VHDL according to IEEE 754 standard.
- The adder accepts and normalizes two numbers, and using two's complement adder to add or subtract the pre-normalized significands.
- The design is simulated and tested using Xilinx Vivado software.

## INVOLVEMENTS

**President,** *Tau Beta Pi Engineering Honor Society* ***May 2017 – May 2019***

- Re-chartered the chapter in the college, initiated over 140 members into the organization.
- Coordinated officers, maintained chapter operations and defended constitution.
- Maintained industrial connection, coordinate recruiting session/workshops on campus.
- Awarded "Effective Use of Technology Award" in recruiting and promoting the organization.

**President,** *Leaders in Engineering and Computer Science - Student Council* ***Nov 2017 – May 2019***

- Developed a unified, comprehensive representation of students in the college.
- Served in Student Advisory Board and assist the college in ABET accreditation.
- Coordinated Engineering Week and similar event series inclusive to all students.

**Matador Mentor,** *CSUN New Student Orientation (NSO)* ***May 2016 – May 2019***

- Mentored incoming orientation leaders and provide support to the NSO Leadership.
- Welcomed and acclimated new students to the university environment and culture.

**Unified We Serve,** *CSUN Matador Involvement Center* ***Sept 2015 – Apr 2019***

- Volunteered in various activities on and off campus as a whole.
- Promoted community engagements and awareness.

**Chair of Financial Affairs Committee,** *Tau Beta Pi National Convention* ***2017, 2018***

- Reviewed the auditor's and Executive Director's reports.
- Reviewed the chapter accounts receivable to TBP Headquarters.
- Determined and made motions pertinent to the association's spending budget.

**Vice President,** *Tau Beta Pi Engineering Honor Society* ***May 2016 - May 2017***

- Assisted President of the chapter in all legal duties of the chapter.
- Maintained communication and coordinated officers for chapter's activities.

**Webmaster,** *Tau Beta Pi Engineering Honor Society* ***Jan 2016 - May 2016***

- Developed and designed a new website for chapter's event postings and updates.
- Maintained and updated the website to enhance members experience.

**Treasurer,** *CSUN Cross-Cultural Friendship Club* ***Aug 2015 - July 2016***

- Handled all financial affairs, preparation of financial report and record keeping.
- Prepared and defended annual budget application for organization's activities.

**I-Care Volunteer,** *North Seattle College Volunteering Program* ***Sept 2014 - May 2015***

- Volunteered in community kitchen to prepare meals to local emergency shelters.
- Packed and transported meals to shelters and facilities, and served the needy.