

Weikun Han

EMAIL: weikunhan@outlook.com
LINKEDIN: <https://www.linkedin.com/in/weikunhan/>
WEBSITE: <https://weikunhan.github.io>
ADDRESS: Bellevue, WA 98004
UPDATE: October 20, 2020

EDUCATION

- 2016-2018 **University of California Los Angeles, CA**
M.S. in Electrical and Computer Engineering
Advised by: Prof. Lei He
- 2011-2016 **Iowa State University, IA**
B.S. in Electrical Engineering
Advised by: Prof. Liang Dong

EXPERIENCE

- JUL. 2020 - PRESENT **Oregon State University, Bellevue, WA**
Research Assistant at CoRIS institute
Supervisor: Prof. Fuxin Li
I researched Deep Learning on 3D Point Clouds and proposed Superpixel PCNN to matches the same CNN performance in 2D images of a similar structure
- JAN. 2020 - JUN. 2020 **Clobotics Global, Bellevue, WA**
Computer Vision Scientist II
I researched the Fine-Grained Image Classification task to improve model performance in classifying thousands of indistinguishable retail goods
- JAN. 2020 - JUN. 2020 *Machine Learning Engineer II*
I implemented an Active Learning Pipeline for the Machine Learning System that enables interactively query human to label necessary training data
- JAN. 2020 - JUN. 2020 *Software Development Engineer II*
I collaborated with the team to design and develop the Data Operations Platform that enables non-technical persons to operate the Machine Learning System
- OCT. 2018 - JAN. 2020 *Computer Vision Scientist*
I researched the Object Detection task to improve model performance on many disorganized product display scenes in the offline retail market
- OCT. 2018 - JAN. 2020 *Machine Learning Engineer*
I implemented the Ceiling Analysis Dashboard for the Machine Learning System that enables real-time model performance monitoring
- OCT. 2018 - JAN. 2020 *Software Development Engineer*
I collaborated with the team to design and develop a Product Search Website that enables people can retrieve new products in streaming data
- AUG. 2018 - OCT. 2020 *Research Intern*
I researched the Image Clustering task to design and develop an Image Retrieval System that can discover new products in the market

MAR. 2018 - JUN. 2018	University of California Los Angeles, CA <i>Graduate Research Assistant at VCLA lab</i> <i>Supervisor: Prof. Song-Chun Zhu</i> I researched Deep Learning Compression to reduce model computation cost and storage size without regression in model performance
SEP. 2016 - SEP. 2017	<i>Graduate Research Assistant at Design Automation Laboratory</i> <i>Supervisor: Prof. Lei He</i> <ul style="list-style-type: none"> • I researched Adversarial Deep Learning to design and develop the Voice Autoencoder to estimate uncertainty and improve robustness • I worked on Embedded Software Validation to design and develop a framework into the symbolic execution tool using the LLVM compiler
AUG. 2013 - APR. 2016	Iowa State University, IA <i>Undergraduate Research Assistant at Laboratory for MEMS and Biochip</i> <i>Supervisor: Prof. Liang Dong</i> <ul style="list-style-type: none"> • I researched Nanotechnology to design, manufacture, and test nano-scale structures devices by operating micro-fabrication laboratory equipment • I co-authored three publications in major journals and two publications in major conferences, and one paper got the best student paper award

AWARDS AND HONORS

- 2017 **Best Student Paper Award**
The 17th IEEE International Conference on Nanotechnology
- 2015 **Magna Cum Laude Honor**
Iowa State University
Ranked 1 st in a class of 2015 Electrical Engineering graduates (Winter)
- 2013 - 2015 **Dean's List Honor**
Iowa State University
Given to top ranked students

PUBLICATIONS

Journal Publications

- [1] Q. Wang, W. Han, Y. Wang, M. Lu, and L. Dong, "Tape nanolithography: a rapid and simple method for fabricating flexible, wearable nanophotonic devices," *Microsystems and Nanengineering*, 4, 31 (2018)
- [2] Y. Wang, L. Liu, Q. Wang, W. Han, M. Lu and L. Dong, "Strain-tunable plasmonic crystal using elevated nanodisks with polarization-dependent characteristics," *Applied Physics Letters*, 108, 071110 (2016)
- [3] Q. Wang, W. Han, P. Liu, L. Dong, "Electrically tunable quasi-3-D mushroom plasmonic crystal," *Journal of Lightwave Technology*, 34, 2175-2181 (2016)

Conference Publications

- [4] Q. Wang, W. Han, Y. Wang, M. Lu and L. Dong, "Tape-based flexible metallic and dielectric nanophotonic devices and metamaterials," *2017 IEEE 17th International Conference on Nanotechnology (IEEE-NANO)*
- [5] Y. Wang, L. Liu, Q. Wang, W. Han, M. Lu and L. Dong, "Strain-tunable two-dimensional plasmonic crystals," *2015 Photonics Conference (IPC)*

TEACHING

FALL 2014 **Iowa State University, IA**
Teacher Assistant, EE 224: Signals and Systems I
Enrollment: 40