

□ 858-231-6703 | 

tacalvin123@gmail.com | 
tacalvin | 
calvin-khang-ta

# **Experience**

#### University of California, Riverside | Video Computing Group

Riverside, CA

GRADUATE RESEARCH ASSISTANT

Jan. 2020 - PRESENT

- Developing automated image analysis pipelines for biological modeling research of Shoot Apical Meristem of Arabidopsis and increasing throughput of existing code base by 400%.
- · Working on developing self-supervised image enhancement algorithms through exploring sparse representations and implicit network priors.
- · Assisted in the development of adversarial attacks on deep learning based classifiers across domains.

Amazon.com San Francisco, CA

**GRADUATE SDE INTERN** June. 2020 - Sept. 2020

· Fullstack development on the Goodreads team

### **University of California, Riverside**

Riverside, CA

TEACHING ASSISTANT Jan. 2020 - PRESENT

- In charge of the lab sections for CS 12- Intro to Programming for Computer Scientist and Engineers II
- Taught undergraduates basic algorithms and C++ features.

Amazon.com Tempe, AZ

GRADUATE SDE INTERN June. 2019 - Sept. 2019

• Working with Seller Partner Promotions Team

**Amazon Web Services** Seattle, WA

SDE INTERN June. 2018 - Sept. 2018

- · Worked on the AWS Comprehend Team. AWS Comprehend is a natural language processing API that offers NLP services such as sentiment analysis and key-phrase extraction.
- Project involved technolgies such as MXNet and varying AWS Services

### **General Atomics Aeronautical Systems**

San Diego, CA

DATA LINKS AND ADVANCED CONCEPTS INTERN II

Jun. 2017 - Aug. 2017

· Projects ranged from developing chat bots to coordinate with air traffic control to extending a Holo Lens demo of a potential future project

## Selected Publications

### Noise2Sparse: Self-Supervised Poisson DenoisingFrom a Single Image

Submitted to MICCAI 2022

CALVIN-KHANG TA, ABHISHEK AICH, AKASH GUPTA, AMIT K. ROY-CHOWDHURY

• In this work, we explore a sparsity and dictionary learning-based approach for self-supervised single image denoising, where the noise is approximated as a Poisson process

# Skills

**Languages** Python, C/C++, Java, MATLAB, Shell Script

Libraries|Tools Git, cmake, nmap, vagrant, ansible, Unity, OpenCV, numpy, pandas, Pytorch, AWS, Docker

# Education

## University of California, Riverside

Riverside, CA

**B.S. COMPUTER SCIENCE** 

June 2019

June 2024

#### University of California, Riverside

Riverside, CA

PHD COMPUTER SCIENCE