

Yu-Cheng Deng

2121 Glacier Drive, Apt 15, Davis, California • Mobile: (530)302-6577 • E-mail: ycdeng@ucdavis.edu
LinkedIn: www.linkedin.com/in/yu-cheng-deng-0413/ • Personal Web: <https://ycdeng0413.github.io/>

CAREER OBJECTIVE

A self-motivated team player who is enthusiastic about software development, computer vision, data analysis and visualization with 2+ years of solid software development experiences. Currently seeking full-time positions in the field of software development, computer vision, software test, and software QA.

EDUCATION

University of California, Davis

M.S. in Electrical and Computer Engineering (ECE), Overall GPA: 3.88/4.00

Davis, CA, USA

Sep. 2018 - Jun. 2020

National Taipei University of Technology

B.S. in Electrical Engineering (EE)

Taipei, Taiwan

Sep. 2014 - Jun. 2018

SKILLS

- **Language Skills:** Mandarin(native), English(proficient)
- **Programming Languages:** Python, MATLAB/Simulink, C/C++, C++/CLI, R, HTML/CSS, JavaScript
- **Software Development:** Image Processing, Computer Vision, Object-oriented Programming, Algorithm, Machine Learning
- **Technical Skillset:** Git, Bash (Shell Scripting), Open CV, SQL, .NET, Linux (Ubuntu, Debian), Windows, macOS

WORK EXPERIENCE

Wintec Industries

Newark, CA, USA

Junior Test Engineer

Jun. 2019 - Aug. 2019

- Build a File Transfer Protocol (**FTP**) Server under **Linux** to which the operating machines can automatically transmit the log files
- Write **C++/CLI** script to build a user-friendly **Graphical User Interface** (GUI) for the production line operators to use FTP
- Implement **Computer Vision** approach (Moving-Object Surveillance) for calculating the productivity of the Printed Circuit Board (PCB) and monitoring the production lines using **Python** and **Open CV** in **Raspberry Pi 4** integrated with **Pi camera**

RESEARCH EXPERIENCE

Master Research- Improved Visualization of Fiber-based Fluorescence Lifetime Imaging in a Clinical Setting

Apr. 2019 - May. 2020

- Apply algorithms and image processing to fluorescence lifetime imaging (FLIm) data visualization for the classification of tumors
- Construct a **Graphical User Interface (GUI)** tool for FLIm data visualization in **MATLAB** for research purposes
- Propose a more robust algorithm for **Real-time FLIm Visualization** for clinical applications

Advisor: Prof. Laura Marcu (Department of Biomedical Engineering, UC Davis)

Coursework Project- Improvement in Reinforcement Learning for Frogger Game

Jan. 2019 - Mar. 2019

- Regenerate the arcade game "Frogger game" using **Python** with PyGame
- Apply the **reinforcement learning** (Q-learning) to the Frogger game and analyze its performance
- Exploit nearest neighbor interpolation approach to improve the performance of the Q-learning for the Frogger game

Coursework Project- Human Following Robot Based on Reactive Algorithm for Safe Navigation

Jan. 2019 - Mar. 2019

- Construct a simulation environment using **MATLAB/Simulink**
- Utilize Simulink toolbox and MATLAB script to simulate a human following robot (Pioneer 3-DX)
- Apply biological obstacle-avoidance algorithm to the sensors and analyze the performance in the synthetic environment

Senior Project- Care System for Pressure Ulcer Patients

Jun. 2017 - Dec. 2017

- Exploit the **Arduino** sensors to measure the values of the major factors (humidity, temperature, pressure, etc.) in causing ulcers
- Employ Arduino Wi-Fi transmission to transmit the sensor data to **IoT** platforms, ThingSpeak (Web) and BLYNK (Android App)
- Use **PHP** with **MySQL** to transmit the data to the database and create webpage for the communication between Server and Client

LEADERSHIP EXPERIENCE

Vice President - Taiwanese Graduate Student Association (TGSA) at the University of California, Davis

Apr. 2019 - Jun. 2020

Chief Executive Officer - Student Union of EE Department at National Taipei University of Technology

Sep. 2015 - Dec. 2016