

DANIEL YOU

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Apply for Software Engineer Intern in Summer 2020

Education

University of California, San Diego M.S. in Electrical and Computer Engineering (Machine Learning and Data Science)	September 2019 - present San Diego, CA
University of Illinois at Urbana-Champaign Exchange Student in Electrical and Computer Engineering; GPA: 3.69/4.00	January 2018 - May 2018 Champaign, IL
National Chiao-Tung University B.S. in Electronics Engineering; GPA: 3.74/4.30; Exchange Student Scholarship	2014 - 2018 Hsinchu City, Taiwan

Skills

Programming Languages	Python (Experienced) , JavaScript, C, C++, SQL, Shell
Toolkits/Frameworks	Git, Docker, Node.js, PostgreSQL, Django, OpenCV, TensorFlow, PyTorch

Experience

Deep Force Inc. Software Development Engineer Intern (Python and JavaScript)	June 2019 - August 2019 Taipei, Taiwan
<ul style="list-style-type: none">Reduced over 90% of time (depends on available cores) for pre-processing data by parallelizing internal tools.Improved facial recognition accuracy by 6.1% with an effective data augmentation pipeline which synthesizes eyeglasses and applies occlusions on human faces; speeded up data augmentation pipeline by 2.5x.Developed websites with Django for attendance system (main contributor) and door security systems (maintainer); designed APIs to communicate with edge devices; deployed to production with nginx and gunicorn.	
Academia Sinica, Institution of Information Science Research Assistant at IIS-Computer Vision Laboratory (Python and Pytorch)	July 2018 - January 2019 Taipei, Taiwan
<ul style="list-style-type: none">Augmented state-of-the-art action recognition models with external memory module to leverage abstract features from data; showed that the memory module is capable of capturing generic features for similar actions in videos.Boosted the performance by 4.1% on three action recognition datasets: UCF-101, HMDB51 and Sports1M, by integrating memory modules to Temporal Segmentation Networks (TSN) with ResNet-101 as backbone.	

Projects

Large-Scale Entity Typing with Subword Embedding	January 2018 - October 2018
<ul style="list-style-type: none">Proposed a pipeline for cleaning and constructing entity typing dataset from PubMed and Wikipedia articles.Performed fine-grained entity typing on two large-scale datasets (~8k, ~1k classes respectively.)Boosted Recall by 16% and F-1 score by 9% using Bidirectional-LSTM with subword-enriched algorithm.	
Wearable Devices in Healthcare on Embedded Systems	February, 2017
<ul style="list-style-type: none">2017 MakeNTU 2nd Best Maker Award sponsored by Cathay Financial Holdings (1 out of 100 teams.)Built a wearable Internet of Things (IoT) device with Arduino, sensors, and MediaTek LinkIt Smart 7688.Set up a server on ASUS TinkerBoard for analyzing data from devices and providing cloud service to users.	
Controller-free Doodle Jump on Embedded Systems	November, 2016 - January, 2017
<ul style="list-style-type: none">Implemented a motion control (object tracking) version of Doodle Jump on PandaBoard using C++ and Qt.Ranked top 1 out of 26 teams in NCTU Embedded Systems Competition.	
Machine Learning-based Template Attack on Cryptosystems	July 2016 - December 2017
<ul style="list-style-type: none">Applied side-channel attack on Chipwhisperer-Lite running AES encryption algorithm by exploiting power signals.Devised a novel variant of template attack using random forests and SVMs with scikit-learn.Increased accuracy by 10.7% compared to Gaussian-based variant with 60% less amount of data needed.	