# Wei Fang's CV [GitHub] [Google Scholar]

#### **About**

Name: Wei Fang Email: fangwei123456g@gmail.com, fwei@pku.edu.cn

#### **Education**

2015.9-2019.6 Tsinghua University, Department of Automation, bachelor

2016.9-2019.6 Tsinghua University, School of Economics and Management, the second bachelor's degree
2019.9-2024.6 (estimate) Peking University, School of Computer Science, Ph.D. candidate, advised by <u>Yonghong Tian</u>

## **Publications**

Papers	Publishers	Author Rank	Citations
Incorporating learnable membrane time constant to enhance learning of	ICCV 2021	1	261
spiking neural networks			
Deep Residual Learning in Spiking Neural Networks	NeurIPS 2021	1	177
SpikingJelly: An Open-source Machine Learning Infrastructure Platform	Science Advances	1	
for Spike-based Intelligence	(In Press)		
Parallel Spiking Neurons with High Efficiency and Ability to Learn Long-	NeurIPS 2023	1	
term Dependencies			
Optimal ANN-SNN Conversion for High-accuracy and Ultra-low-latency	ICLR 2022	2	60
Spiking Neural Networks			
Exploring Loss Functions for Time-based Training Strategy in Spiking	NeurIPS 2023	2	
Neural Networks			
Pruning of Deep Spiking Neural Networks through Gradient Rewiring	IJCAI 2021	3	30
State Transition of Dendritic Spines Improves Learning of Sparse Spiking	ICML 2022	3	12
Neural Networks			
Training Spiking Neural Networks with Event-driven Backpropagation	NeurIPS 2022	3	10
A Unified Framework of Soft Threshold Pruning	ICLR 2023	3	2

### **Patents**

CN115204356A

# **Projects**

SpikingJelly: an open-source deep learning framework for Spiking Neural Networks (SNNs)

- 800+ stars, 180+ forks, 400+ issues/pull requests
- There are more than 123 publications using SpikingJelly, including ICCV 3, IJCAI 3, NeurIPS 7, CVPR 4, ICLR 4, AAAI 3, ICML 2, ECCV 3, TMLR 1, ACM MM 1, PR 1, Nature Communications 1, IEEE Transactions 7
- The fastest spiking deep learning framework in <u>benchmarks conduct by Open Neuromorphic</u>

### Python JPEG Encoder

This project starts from scratch to create a standardized JPEG file

# Tello GUI Controller

A GUI controller based on Qt5 for the DJI Tello UAV.

## Contributions to other open-source projects

- <u>Lava DL</u>(a library of deep learning tools for deep event-based networks under Intel's leadership): fix the bug of WgtScaleBatchNorm, block.AbstractInput
- <u>Awesome Model Quantization</u>(Collections about model quantization): fix the errors of paper URLs

# **Awards**

- Outstanding Students of the Year of National Engineering Laboratory for Video Technology, Peking University, in 2021
- Outstanding developers of the OpenIntelligence (OpenI) community in 2020, 2021, and 2022
- The first prize of the fourth China Softward Open Source Innovation Competition
- Merit Student of Peking University in the academic year of 2021-2022
- College Scholarship (Schlumberger Scholarship) of School of Computer Science, Peking University in the academic year of 2021-2022

Note: Data in this CV are as of 2023.9.22