

Rui Wang

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Research Scientist, HeliXon

EXPERIENCE

Research Scientist

HeliXon

Beijing, China
Aug. 2021 - present

EDUCATION

Purdue University

Bachelor of Science in Computer Engineering

West Lafayette, IN
Aug. 2017 - May 2020

- o GPA: 3.84
- o Eli Shay Scholarship
- o Advisor: Prof. David I. Inouye

OPENSOURCE CONTRIBUTION

Massively reduce LayerNorm/RMSNorm training memory

<https://github.com/NVIDIA/apex/pull/1715>

NVIDIA/apex
Sept, 2023

- o By identifying tensors to share with other parts of the modern networks, this technique rewrites the gradient computation logic of LayerNorm since day 1 and reduces the training memory usage to near zero.

PREPRINT

High-resolution de novo structure prediction from primary sequence

Biorxiv:<https://www.biorxiv.org/content/10.1101/2022.07.21.500999v1>

July, 2022

- o Ruidong Wu*, Fan Ding*, Rui Wang*, Rui Shen*, Xiwen Zhang, Shitong Luo, Chenpeng Su, Zuofan Wu, Qi Xie, Bonnie Berger, Jianzhu Ma, Jian Peng (* indicates equal contribution)

PUBLICATIONS

Shapley Explanation Networks

International Conference on Learning Representations (ICLR) 2021

Poster, May 2021

* Contributed talk at NeurIPS 2020 workshop on Interpretable Inductive Biases and Physically Structured Learning

* Rui Wang, Xiaoqian Wang, David I. Inouye

WIP: Automating Anonymous Processing of Peer Evaluation Comments

2020 ASEE Virtual Annual Conference Content Access

Jun. 2020

* Siqing Wei, Rui Wang, Matthew W. Ohland, Gaurav Nanda

Natural Language Processing System for Self-Reflection and Peer-Evaluation

Proceedings of the International Conference on Industrial Engineering and Operations Management

Oct. 2019

* Rui Wang, Siqing Wei, Daniel Ferguson, Matthew W. Ohland

FUNDING

Supplement Request to NSF award #1431694 (Funded)

"Optimizing Student Team Skill Development Using Evidence-Based Strategies"

10/01/2013 – 03/31/2022

- o authoring of the proposed supplement as an undergraduate student and responded to reviewer questions in preparation for the proposal being funded for \$4,000 to support undergraduate research
- o Amount: \$4,000. (The main award was funded with \$1,861,627)
- o PI: Matthew Ohland, Co-PI: Richard Layton, Misty Loughry, Daniel Ferguson, and David Woehr.

TEACHING

Teaching Assistant

Purdue University

West Lafayette, IN

- o ENGR 13100: Transforming Ideas to Innovation I
- o ECE 36800: Data Structures