




# 周学习总结

许典



# 视频学习



CNN



RNN



# 实验情况

- 完成CNN的demo
- CNN的demo的增强版1：将训练好的模型导出，使用Linux上面的C++版的PyTorch和OpenCV完成预测任务。
  - 完成模型的导出和导入
  - 在模型预测上面的存在数据转换的问题，下周继续解决
- 并没有开始RNN的实验

# 论文学习情况

- High-Performance Video Content Recognition with Long-term Recurrent Convolutional Network for FPGA
- <https://zhangxf218.wixsite.com/mysite/publications>

The screenshot shows a web browser displaying the 'Publications' page of Xiaofan Zhang's Wix website. The browser's address bar shows the URL 'zhangxf218.wixsite.com/mysite/publications'. The website has a dark blue header with the name 'Xiaofan Zhang' and the title 'Ph.D. Candidate'. Below the header is a navigation bar with links to 'Home', 'Publications', 'Projects', 'Awards', and 'Teaching/Services'. The 'Publications' section is divided into two years: 2021 and 2020. For 2021, the publication 'Efficient Methods for Mapping Neural Machine Translator on FPGAs' is listed, co-authored by Qin Li, Xiaofan Zhang\*, Jinjun Xiong, Wen-mei Hwu, and Deming Chen. For 2020, two publications are listed: 'DNNExplorer: A Framework for Modeling and Exploring a Novel Paradigm of FPGA-based DNN Accelerator' and 'Effective Algorithm-Accelerator Co-design for AI Solutions on Edge Devices', both co-authored by Xiaofan Zhang\* and others.

Publications | mysite

zhangxf218.wixsite.com/mysite/publications

## Xiaofan Zhang

Ph.D. Candidate

- Home
- Publications
- Projects
- Awards
- Teaching/Services

### 2021


**Efficient Methods for Mapping Neural Machine Translator on FPGAs**  
Qin Li\*, **Xiaofan Zhang\***, Jinjun Xiong, Wen-mei Hwu, Deming Chen (*\*equal contributors*)  
IEEE Transactions on Parallel and Distributed Systems ([Early access](#))

### 2020

**DNNExplorer: A Framework for Modeling and Exploring a Novel Paradigm of FPGA-based DNN Accelerator** [[PDF](#)]  
**Xiaofan Zhang\***, Hanchen Ye\*, Junsong Wang, Yonghua Lin, Jinjun Xiong, Wen-mei Hwu, Deming Chen (*\*equal contributors*)  
39th International Conference on Computer Aided Design (ICCAD), San Diego, CA, Nov. 2020 (Virtual)

**Effective Algorithm-Accelerator Co-design for AI Solutions on Edge Devices**  
[Invited] Cong Hao, Yao Chen, **Xiaofan Zhang**, Yuhong Li, Jinjun Xiong, Wen-mei Hwu, Deming Chen  
30th ACM Great Lakes Symposium on VLSI (GLSVLSI), Sep. 2020 (Virtual)

**A-QED Verification of Hardware Accelerators** [[PDF](#)]  
Eshan Singh, Florian Lonsing, Saranyu Chattopadhyay, Max Strange, Peng Wei, **Xiaofan Zhang**, Yuan Zhao, Jason Cong, Deming Chen, Zhiru Zhang, Priyanka Raina, Clark Barrett, and Subhasish Mitra



# 下周计划

- 继续完成CNN的实验，并尝试部署部分运算到FPGA
- 完成RNN的demo实验
- NLP相关的中文论文