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# Zedong Wang

*Pursue solid deep learning research.*

Academic Blog 🏠

Twitter 🐦

GitHub 📁

## Short Biography

I am a Hong Kong student at Huazhong University of Science and Technology. I am working on computer vision problems with special focus on few-shot semantic segmentation, under Prof. Xinggang Wang at HUST. During the summer 2021, I fortunately worked as a visiting student of Multimedia Laboratory (MMLab), Shenzhen Institute of Advanced Technology (SIAT), Chinese Academy of Sciences (CAS). I was a deep learning research intern (remote) at Key Laboratory of Digital Earth Science, Aerospace Information Research Institute, CAS (2020 - 2021).

My academic desire is to pursue solid and interpretable deep learning research under a pure academic environment. I have been preparing for this for years. Therefore, as a passionate young researcher with clear mind, I am now sincerely applying for a PHD position in 2023 Fall.

## Education and Degrees

2019 – 2023 **B.E. in Electronics Information Engineering**, *Huazhong University of Science and Technology*.

- **The 1<sup>st</sup> year**, I focused on the development of modern science and the philosophical science to build a deep and clear recognition of the root of modern science & engineering by myself.
- **The 2<sup>nd</sup> year**, I tried to recognize some specific research fields in labs such as complex network, machine learning, deep learning, computer vision with diverse professors. Finally I determined my research interest and step in it.
- **The 3<sup>rd</sup> year**, I dig deep into deep learning and computer vision particularly few-shot semantic segmentation.
- At the same time, I have achieved good grades in AI-related courses such as Engineering training (94/100), Software Project (92/100) and python programming (87/100) etc.

## Academic Experience

- Sep. 2021 – present **Research Student**, under Prof. Xinggang Wang, *Huazhong University of Science and Technology*.  
Independent few-shot semantic segmentation research under prof. Xinggang Wang.
- Jul. 2021 – Sep. 2021 **Visiting Student**, *MMLab, Shenzhen Institute of Advanced Tech. (SIAT), Chinese Academy of Sciences*.  
Semantic segmentation research and computer vision model configuration under Dr. Bin Fu.
- Sep. 2020 – Apr. 2021 **Research Intern**, *Key Lab of Digital Earth Science, Chinese Academy of Sciences*.  
1<sup>st</sup> stage: Rudiment deep learning study; 2<sup>nd</sup> stage: Independent building segmentation research under Dr. Xiaoping Du.
- Aug. 2019 – Oct. 2019 **Participation of a machine learning workshop (remote)**, *Louisiana State University*.  
Get my 1<sup>st</sup> touch of machine learning. Pave ways for the future study and research.
- Sep. 2017 – Apr. 2017 **Head of STEM club**, *Shenzhen NanShan Foreign Language School Senior High School*.  
1<sup>st</sup> author of a municipal invasive plants investigation thesis which won the support funds from Shenzhen city government.  
Build a scientific research sense and mindset.

## Languages

Chinese (native), English (fluent). IELTS 7.0 Overall Grade (2019)

## Something matters (as a researcher)

### ● What are my core competences?

#### 1. Rich research experience in comparison with peers.

1) The experience shaped my scientific research recognition in early stage. I am acquainted with the research pattern, which can free me from the position transfer (from a student to a researcher) and domain adaption in the future.

2) With the ups and downs in the research with different groups, I have equipped with a relatively mature research mentality. These traits can provide me a strong impetus in my future research life.

#### 2. Habits and abilities.

##### 1) Research habits:

a. I am used to keeping myself in good conditions physically and mentally (e.g., regular physical training and meditation).

Therefore, I am able to work hard if needed.

b. I have built regular paper reading and summarizing habit for years.

c. Once I have an idea or a solution, I would realize it as soon as possible.

##### 2) Theoretically:

a. I have been learning the theoretical details of deep learning building blocks. From my point of view, it really matters for solving deep learning and computer vision problems.

b. **Creativity usually comes from details.** I have planned to make explanations of some theoretical details regularly on my homepage in the form of academic blogs.

##### 3) Technically:

a. I am familiar with deep learning research tools like PyTorch, computer vision model training and testing process etc.

b. Likewise, my research source code would be updated in my homepage and GitHub if possible.

All the content above would be updated repeatedly as long as I obtain deeper recognition of them. In my view, it is not only a platform to show my academic insights and abilities, but a testimony of my lifelong learning.

#### 3. Last and foremost, research passion and determination.

1) I have the internal drive for deep learning and computer vision research. Specifically, the pure research process itself can bring me great pleasure and largely propel my positive feedback loop after I am determined to do research in the past of my life.

2) My academic goal so to **pursue solid and interpretable deep learning research under a relatively pure research environment**. However, I am not in a position that allows me to do like that right now although I have been drooling over it for years. Therefore, it makes me much more eager to be a researcher to dig deep devotedly in my research field.

I believe I would be a self-motivated researcher with great potential if you give me a chance.

### ● Why I still have no one publication?

1. **From the subjective point:** My academic discipline is to do solid research rather than make bells and whistles. I am not willing to publish my works merely for an eye-catching publication data but with no concrete novelty.

#### 2. From the objective point:

1) My research time is always sporadic since I am not a full-time researcher. With separated time and distractions from my school, it is hard to do independent innovative work. It is exactly the reason why I am so eager for the opportunity to do deep and solid research whole-heartedly. It is what I am longing for.

2) For special reasons in my department, the equipment in my lab has been shut down for months. I have been renting for device by myself for my experiments since Feb. 2022. It negatively affects my experiment progress.