

# Xiaohan Zou

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## Education

<b>Pennsylvania State University</b>	State College, PA
Ph.D. in Computer Science and Engineering	08/2023 - 05/2028 (Expected)
<b>Boston University</b>	Boston, MA
M.S. in Computer Science, GPA: 3.79/4.0	09/2021 - 01/2023
<b>Tongji University</b>	Shanghai, China
B.Eng. in Software Engineering, GPA: 84.35/100	09/2016 - 07/2020

## Publications and Preprints (also see [Google Scholar](#))

- P1 **TokenFlow: Rethinking Fine-grained Cross-modal Alignment in Vision-Language Retrieval**  
[Xiaohan Zou](#), Changqiao Wu, Lele Cheng, Zhongyuan Wang  
*Preprint*, 2022
- P2 **Efficient Meta-Learning for Continual Learning with Taylor Expansion Approximation**  
[Xiaohan Zou](#), Tong Lin  
*International Joint Conference on Neural Networks (IJCNN)*, 2022 (*Oral*)
- P3 **To be an Artist: Automatic Generation on Food Image Aesthetic Captioning**  
[Xiaohan Zou](#), Cheng Lin, Yinja Zhang, Qinpei Zhao  
*International Conference on Tools with Artificial Intelligence (ICTAI)*, 2020 (*Oral*)
- P4 **A Survey on Application of Knowledge Graph**  
[Xiaohan Zou](#)  
*International Conference on Control Engineering and Artificial Intelligence (CCEAI)*, 2020

## Industry Experience

<b>Kuaishou Technology</b> · Intelligent Creation Team	Beijing, China
Machine Learning Engineer Intern	07/2021 - 07/2022
Worked on fine-grained vision-language learning (see <a href="#">P1</a> ). Built a PyTorch codebase for video-text retrieval.	
<b>China Electronics Technology Group Corporation</b>	Chongqing, China
Software Engineer Intern	10/2020 - 06/2021
Involved in building a security visualization system for an archaeological site using Vue and Cesium.	
<b>Banana Interactive</b>	Shanghai, China
Game Engineer Intern	10/2019 - 05/2020
Developed and maintained 3 H5 games using JavaScript and Affinity Designer.	

## Academia Experience

<b>Boston University</b> · Computer Vision and Learning Group	Boston, MA
Graduate Student Researcher (Advisor: Prof. <a href="#">Bryan Plummer</a> )	09/2022 - 12/2022
Worked on rehearsal-free continual learning using an arbitrary, fixed parameter budget.	
<b>Peking University</b>	Remote
Research Assistant (Advisor: Prof. <a href="#">Tong Lin</a> )	09/2020 - 01/2022
Designed a fast meta-learning algorithm for continual learning problems (see <a href="#">P2</a> ).	

<b>Tongji University</b>	Shanghai, China
<i>Undergraduate Student Researcher (Advisor: Prof. <a href="#">Qinpei Zhao</a>)</i>	03/2020 - 06/2020
Proposed a method for food image aesthetic captioning, built a <a href="#">dataset</a> for this new task (see <a href="#">P3</a> ).	
<b>Tongji University · Xlab</b>	Shanghai, China
<i>Undergraduate Student Researcher (Advisor: Prof. <a href="#">Qingfeng Du</a>)</i>	09/2018 - 06/2019
Worked on 1) speech emotion recognition ( <a href="#">600+ GitHub stars</a> ) and 2) fault diagnosis for microservice architectures without knowing the calling graph using Bayesian networks.	
<b>Peking University</b>	Beijing, China
<i>Research Assistant (Advisor: Prof. <a href="#">Tong Lin</a>)</i>	07/2018 - 08/2018
Worked on semi-supervised machine translation utilizing the structure duality.	

## Awards and Honors

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<b>Bronze</b> , China Collegiate Programming Contest (CCPC)	2018
<b>Finalist</b> , ACM International Collegiate Programming Contest (ICPC) Asia Regional	2018
<b>Second Prize</b> , China Mathematical Contest in Modeling (CUMCM)	2017, 2018
<b>Second Prize</b> , Tongji University Programming Contest	2017, 2018
<b>Second Prize</b> , East China Normal University Programming Contest	2017

## Core Courses

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**Machine Learning:** Machine Learning, Image and Video Computing, Computational Tools for Data Science  
**Mathematics:** Probability and Mathematical Statistics, Calculus, Linear Algebra, Discrete Mathematics

## Activities

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Vice Chief Technology Officer & Chief Experience Officer, Tongji Microsoft Student Club	2018 - 2019
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## Skills

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**Programming Languages:** Python, JavaScript/TypeScript, HTML/CSS, Java, C/C++  
**Tools and Frameworks:** Git, PyTorch, Keras, scikit-learn, Linux, Vue, React, Django,  $\text{\LaTeX}$   
**Languages:** Chinese (native), English (proficient)