

# DONG HUO

📧 [github.com/Dong-Huo](https://github.com/Dong-Huo) **in** [dong-huo-55aa5411b/](https://dong-huo-55aa5411b/) ✉ [dhuo@ualberta.ca](mailto:dhuo@ualberta.ca)

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*Targeting an internship position in Fall 2022/Winter 2023*

## EDUCATION

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<b>University of Alberta, Canada</b> <i>Ph.D., Computing Science</i>	<i>Jan 2020 - Now</i>
<b>University of Alberta, Canada</b> <i>M.Sc., Computing Science</i>	<i>Sept 2018 - Dec 2019</i>
<b>Harbin Institute of Technology, China</b> <i>B.Eng., Software Engineering</i>	<i>Sept 2014 - Jun 2018</i>

## RESEARCH INTERESTS

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Image Restoration (Deblurring, Super-Resolution, Denoising, Hyperspectral Reconstruction), Image Segmentation, Multi-modal Fusion, Structured Light, Medical Image Processing, Object Detection/Tracking, Convolutional Neural Network, Transformer

## WORK EXPERIENCE

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<b>Computer Graphics Lab, University of Alberta</b> Advisor: Prof. Herb Yang Title: Research Assistant Research topics: Image Processing (Deblurring, Super-Resolution, Denoising), Image Segmentation, and Hyperspectral Image Reconstruction	<i>Jun 2019 - Now</i>
<b>Quicktron Robotics, China</b> Advisor: Lei Luo Title: Algorithm Engineer Internship Research topics: Time-sequence Prediction	<i>Jul 2016 – Aug 2016</i>

## TEACHING EXPERIENCE

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<b>CMPUT 174 - Introduction to the Foundations of Computation I, University of Alberta</b> Instructor: Sadaf Ahmed Title: Teaching Assistant Teaching topics: Python, Pygame	<i>Fall 2018 - Fall 2021</i>
<b>CMPUT 175 - Introduction to the Foundations of Computation II, University of Alberta</b> Instructor: Osmar Zaiane Title: Teaching Assistant Teaching topics: Python, Data Structure	<i>Winter 2019 - Winter 2022</i>

## TECHNICAL SKILLS

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<b>Programming:</b>	Python, MATLAB, C++
<b>Frameworks:</b>	Pytorch, TensorFlow, OpenCV, Scikit learn, ROS
<b>Tools :</b>	Latex, PyCharm, Labelme, AWS

## PUBLICATIONS

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1. **Dong Huo**, Abbas Masoumzadeh, Herb Yang, “Blind Non-Uniform Motion Deblurring using Atrous Spatial Pyramid Deformable Convolution and Deblurring-Reblurring Consistency”, in the New Trends in Image Restoration and Enhancement Workshop and Challenges at CVPR (CVPR NTIRE-Workshop), 2022

2. **Dong Huo**, Abbas Masoumzadeh, Rafsanjany Kushol, Herb Yang, “Blind Image Deconvolution Using Variational Deep Image Prior”, in the IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2022 (Under Review)
3. **Dong Huo**, Jian Wang, Yiming Qian, Herb Yang, “Glass Segmentation with RGB-Thermal Image Pairs”, in the IEEE Transactions on Image Processing (TIP), 2022 (Under Review)
4. **Dong Huo**, Herb Yang, “Blind Image Super-Resolution with Spatial Context Hallucination”, Technical Report, 2020
5. Rafsanjany Kushol, Abbas Masoumzadeh, **Dong Huo**, Sanjay Kalra, Herb Yang, “ADDFormer: Alzheimer’s Disease Detection from structural MRI using Fusion Transformer”, in the IEEE International Symposium on Biomedical Imaging (ISBI), 2022
6. Zhanghao Sun, Yu Zhang, Yicheng Wu, **Dong Huo**, Yiming Qian, Jian Wang, “Structured Light with Redundancy Codes”, Technical Report, 2022

## PATENT

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1. Tonghua Su, Bin Li, **Dong Huo**, “High Efficient Method and System for Tumor labeling on Medical Image”, China patent CN2018107992792.
2. Tonghua Su, Lijuan Yu, **Dong Huo**, “Deep-learning-Based System for Diagnostic report Generation from Medical Image”, China patent CN2018107589994.

## AWARD

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| • Honorable Mention of American Mathematical Modeling Contest                                  | 2017 |
| • The First Prize of the National Mathematical Modeling Contest of Heilongjiang Province       | 2016 |
| • The Second Prize of National Undergraduate IOT Design Contest in Northeastern China Division | 2015 |

## PROFESSIONAL SERVICE

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- Reviewer for IEEE Transactions on Circuits and Systems for Video Technology (T-CSVT), IEEE Signal Processing Letters (SPL)
- Reviewer for CVPRW2022