# FANYOU WU

+1 (765) 714 - 9530 \$\phi\$ wu1297@purdue.edu \$\phi\$ https://wufanyou.github.io/

## **EDUCATION**

Purdue University
Ph.D in Forestry
Machine Learning Application in Forest Products
University of Eastern Finland
M.S. in Wood Material

Nanjing Forestry University
B.E in Wood Material

Jan 2018 - Dec 2021
Machine Learning Application in Forest Products
Sep 2015 - Apr 2017
Sep 2011 - Jun 2015

#### **INTERNSHIP**

**Envision Digital** 

Aug 2017 - Dec 2017

Machine Learning Engineer

Develop machine learning solution for better predicting user demand of electricity.

## SELECTED PUBLICATIONS

Wu, F., Gazo, R., Benes, B., & Haviarova, E. (2021). Deep BarkID - A Portable Tree Bark Identification System by Knowledge Distillation. European Journal of Forest Research.  $\clubsuit$  [link]

Wu, F., Gazo, R., Haviarova, E., & Benes, B. (2021). Wood identification based on longitudinal section images by using deep learning. Wood Science and Technology, 55(2), 553-563.  $\clubsuit$  [link]

Wu, F., Gazo, R., Haviarova, E., & Benes, B. (2019). Efficient Project Gradient Descent for Ensemble Adversarial Attack. IJCAJ workshop.  $\overline{m}$  [link]

**Wu, F.**, & Kärenlampi, P.P. (2017). Phase Transition in A Growing Network. Journal of Complex Networks. [link]

Liu, Y., Wu, F., Lyu, C., Liu, X., Liu, Z. & Ye, J. (2021). Learning to Reposition on an Online Taxihailing Platform.  $\blacksquare$ 

\* Forestry | 📷 Computer Vision | 🚥 Transportation | 💷 Under Review | 🚣 Co-first Author

## COMPETITIONS WITH CASH PRIZE

CVRP 2021 The 2nd Agriculture-Vision Prize Challenge	2021
$2nd, 3000+1200 \ USD$	[link]
Develop models for farmland prediction based on image segmentation models.	
NeurIPS 2020 Traffic4cast Competition	2020
2nd, 5000 USD	[link]
Develop models for traffic map movies prediction based on image segmentation models.	
KDD CUP 2020 Reinforcement Learning Competition Track	2020
1st in Reposition Track, 8000 USD	[link]
Develop vehicle repositioning models based on Deep-Q learning.	
IJCAI-19 Alibaba Adversarial AI Challenge-Competition	2019
1st in Traget Attack Track, 5000 USD	[link]
Develop adversarial attack methods based on a modification of Projection Gradients Descents.	
KDD CUP 2019 Regular Machine Learning Competition Track	2019
4th, 1000 USD	[link]
Develop transportation recommendation models based on tree ensemble and node embedding.	
Other Competitions 2017	-2018
In total, more than 30000 USD	[link]

Develop competitions solution mainly based on classic data mining models.