

# FANYOU WU

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## EDUCATION

<b>Purdue University</b> <i>Ph.D in Forestry</i>	Jan 2018 - Dec 2021 <i>Machine Learning Application in Forest Products</i>
<b>University of Eastern Finland</b> <i>M.S. in Wood Material</i>	Sep 2015 - Apr 2017
<b>Nanjing Forestry University</b> <i>B.E in Wood Material</i>	Sep 2011 - Jun 2015

## INTERNSHIP

<b>Envision Digital</b> <i>Machine Learning Engineer</i> Develop prescriptive method for route optimization problems.	Aug 2017 - Dec 2017
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## SELECTED PUBLICATIONS

- Wu, F.**, Gazo, R., Haviarova, E., & Benes, B. (2021). Deep BarkID - A Portable Tree Bark Identification System by Knowledge Distillation. European Journal of Forest Research. 🌲 [publishing]
- 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. 🌲 [link]
- Wu, F.**, Gazo, R., Haviarova, E., & Benes, B. (2019). Efficient Project Gradient Descent for Ensemble Adversarial Attack. IJCAJ workshop. 📷 [link]
- Liu, Y., **Wu, F.**, Lyu, C., Liu, X., & Liu, Z.,(2021). Behavior2vector: Embedding Users' Personalized Travel Behavior to Vector. IEEE Transactions on Intelligent Transportation Systems. 🚦 🗺️ [link]
- Liu, Y., **Wu, F.**, Lyu, C., Liu, X., Liu, Z. & Ye, J.,(2021). Learning to Reposition on an Online Taxi-hailing Platform. 🚦 📖 🗺️
- \* 🌲 Forestry | 📷 Computer Vision | 🚦 Transportation | 📖 Under Review | 🗺️ Co-first Author

## COMPETITIONS

<b>Amazon Last Mile Routing Research Challenge</b> <i>6th</i> Develop prescriptive method for route optimization problems.	2021 [link]
<b>CVRP 2021 The 2nd Agriculture-Vision Prize Challenge</b> <i>2nd, 3000+1200 USD</i> Develop models for farmland prediction based on image segmentation models.	2021 [link]
<b>NeurIPS 2020 Traffic4cast Competition</b> <i>2nd, 5000 USD</i> Develop models for traffic map movies prediction based on image segmentation models.	2020 [link]
<b>KDD CUP 2020 Reinforcement Learning Competition Track</b> <i>1st in Reposition Track, 8000 USD</i> Develop vehicle repositioning models based on Deep-Q learning.	2020 [link]
<b>IJCAI-19 Alibaba Adversarial AI Challenge-Competition</b> <i>1st in Target Attack Track, 5000 USD</i> Develop adversarial attack methods based on a modification of Projection Gradients Descents.	2019 [link]
<b>KDD CUP 2019 Regular Machine Learning Competition Track</b> <i>4th, 1000 USD</i> Develop transportation recommendation models based on tree ensemble and node embedding.	2019 [link]
<b>Other Competitions</b> <i>In total, more than 30000 USD</i> Develop competitions solution mainly based on classic data mining models.	2017 – 2018 [link]