Curriculum Vitae

Essential information

Name : **Xing Dong**　　　　**Year of birth** :1997 01

TEL : **19157737673**　　　　**Email** : **807867176@qq.com**

Address: Hangzhou, zhejiang

Education background

2020-2023 (Master)　　**Zhejiang A & F University**　　**Computer vision**　　3.42/4

2016-2020 (Bachelor)　**Jiangxi Agricultural University**　**Biotechnology**

Achievement

Prediction algorithm of water content and chlorophyll content based on spectral information 2022.05-2022.11

- **Main innovation:** The classification model based on full wave and characteristic bands was designed, and the regression analysis of spectral information and chlorophyll content and water content of Chinese fir leaves under drought stress was realized, and the inversion model with the best effect at present was realized.

Research on plant drought stress recognition method based on improved YOLOv5s 2021.07-2022.02

- **Main innovation:** Based on the self-improved YOLOv5s, the aluminum stress detection model of Chinese fir was established, the correlation between Chinese fir phenotype and drought stress was excavated, and the non-destructive and rapid extraction of Chinese fir episexual characteristics was realized.

Vision-based plant response to drought and high temperature stress and its phenotypic analysis model design 2021.01-2021.08

- **Main innovations:** The association between phenotype and aluminum stress of Chinese fir was established based on computer vision technology, the non-destructive and rapid extraction of episexual characteristics of Chinese fir, the establishment of aluminum stress recognition model of Chinese fir, and the realization of high-efficiency aluminum stress recognition of Chinese fir.

Achievement

Paper:

【1】 **Xing D,** Hui K, Tian B, et al. Image Segmentation of Gastroscopy based on ConvNeXt 2.5D Unet [C]. *Computer, Artificial Intelligence and Control Engineering, 2023,* https://doi.org/10.1117/12.2681719 **(EI)**

【2】 **Xing D,** Sun P, Wang Y, et al. A CNN-LSTM-att Hybrid Model for Classification and Evaluation of Growth status under Drought and Heat stress in Chinese fir [J]. *Plant Methods, 2023,* **(IF:5.827)**

【3】　**Xing D,** Lei S, Zhu Y, et al. DNLN: Image Super-Resolution with Deformable Non-Local Attention and Multi-Branch Weighted Feature Fusion. [J]. IEEE Transactions on Image Processing **(under review)**

【4】　**Xing D,** Lei S, Zhu Y, et al. DiffSRGAN: Single Image Super-Resolution Using Conditional Generative Adversarial Network with Geometric Perceptual Loss. [J]. Signal Processing: Image Communication **(under review)**

【5】　**Xing D,** Zhou Z, Liao G, Lei S, Zhu Y, et al. New Loss Functions Using Control Function for Medical Image Registration. [J]. IEEE Transactions on Biomedical Engineering **(under review)**

软件著作

【1】　Classification system of Chinese fir under drought stress v1.0

Competitions：

【1】　**2022 Kaggle**（Sartorius - Cell Instance Segmentation）**Bronze**

【2】　**2023 Kaggle**（Learning Equality - Curriculum Recommendations）**Bronze**

Project

- **Key research and development project of Zhejiang Province（295w）**　　**2021.09-2023.03**
  Main participants
  Responsible content: project-related material writing, construction of technical system for digital utilization of characteristic economic forest germplasm resources (2021C02054)
- **Zhejiang agricultural research and development project （50w）**　　**2021.09-2025.03**
  Main participants
  Responsible content: project-related material writing, major scientific and technological special project for new variety breeding (2021C02070-8): research on the breeding algorithm of new varieties of high-carbon high-quality timber tree species.

Skill certificate

- Senior Software engineer, National Ministry of Industry and Information Technology data analysis, information security management,Microsoft Technology Associate(MTA)
- Proficient in Linux, tensoflow, pytorch, good at python, matlab
- 2021 National Third Class Academic Scholarship, 2022 National Third Class Academic Scholarship

Activities

- Hobby sports and fitness, the sixth place in the total score of the school athletic games
- Love to play table tennis, football, college cup football champion, Zhejiang A & F University freshman cup football runner-up
- Like to read books, regularly participate in reading sharing sessions (outstanding writing)

Self assessment

I am positive-minded, enthusiastic and cheerful. Outstanding learning ability, strong scientific research logical thinking, good at writing various technical documents and various cutting-edge