# 信电号角系列学术报告——

# ICSaid2021 第三分会场报告

| Session 3: Agricultural Artificial Intelligence | |
|---|---|
| **July 11, 2021 (Sunday)**<br>**Room 245, CIEE, CAU** | |
| **Moderator: Associate Prof. Ran Zhao**<br>主持人：赵然 副教授 | |
| **08:30-08:50** | **Application of Artificial Intelligence in Intelligent Fish Feeding**<br>**Prof. Chao Zhou**<br>National Engineering Research Center for Information Technology in Agriculture<br>人工智能应用于鱼类智能投喂的探讨<br>周超 研究员<br>国家农业信息技术工程研究中心 |
| **08:50-09:10** | **In Vivo Sensors and On-line Detecting Systems for Information in Plants**<br>**Prof. Yongbing Long**<br>South China Agricultural University<br>植物体内信息活体传感器与在线检测系统<br>龙拥兵 教授<br>华南农业大学 |
| **09:10-09:30** | **Maize Phenotyping Technologies for Breeding**<br>**Prof. Xiqing Wang**<br>China Agricultural University<br>智慧选材：玉米表型技术的探索<br>王喜庆 教授<br>中国农业大学 |
| **09:30-09:50** | **Methods for Obtaining Phenotypic Parameters of Soybean Based on Computer Vision**<br>**Associate Prof. Minjuan Wang**<br>China Agricultural University |

| | |
|---|---|
| | 基于计算机视觉的大豆表型参数获取方法研究<br>王敏娟 副教授<br>中国农业大学 |
| **Moderator: Prof. Xiqing Wang**<br>主持人：王喜庆 教授 | |
| **10:00-10:20** | **Tomato Early Blight Real Time Detection in Greenhouse**<br>**Dr. Yan Zhang**<br>Beijing Agricultural Information Technology Research Center<br>设施番茄早疫病实时探测方法研究<br>张燕 博士<br>北京农业信息技术研究中心 |
| **10:20-10:40** | **Research on Apple Detection and Video Counting Method Based on Deep Learning**<br>**Associate Prof. Longsheng Fu**<br>Northwest A&F University<br>基于深度学习的苹果检测与视频计数方法研究<br>傅隆生 副教授<br>西北农林科技大学 |
| **10:40-11:00** | **Crop Phenotype Measurement Based on Mobile Platform**<br>**Yanlong Miao**<br>China Agricultural University<br>基于移动测量平台的作物表型快速测量<br>苗艳龙<br>中国农业大学 |
| **11:00-11:20** | **Research Progress on High Throughput Phenotyping for Tropical and Sub-tropical Plants**<br>**Associate Prof. Xiuhua Li**<br>Guangxi University<br>热带亚热带作物的高通量表型研究进展<br>李修华 副教授<br>广西大学 |
| **11:20-11:40** | **Tillering Number Counting System of Winter Wheat Based on Lightweight Convolutional Neural Network**<br>**Yunxia Li** |

| | |
|---|---|
| | China Agricultural University<br>基于轻量级卷积神经网络的冬小麦苗期分蘖数估算系统<br>李云霞<br>中国农业大学 |
| **11:40-12:00** | **Study on Detection of Wheat Scab Disease Based on Near Ground Image**<br>**Prof. Chengming Sun**<br>Yangzhou University<br>基于近地图像的小麦赤霉病检测研究<br>孙成明 教授<br>扬州大学 |
| **Moderator: Associate Prof. Minjuan Wang**<br>主持人：王敏娟 副教授 | |
| **14:00-14:20** | **Diseases and Pets Articles Identification Model Based on Attention Pooling and Stacked Structure**<br>**Zhan Tang**<br>China Agricultural University<br>基于注意力池化和堆叠式结构的病虫害文献识别模型<br>唐詹<br>中国农业大学 |
| **14:20-14:40** | **Fish Density Estimation Method Based on Deep Learning**<br>**Song Zhang**<br>China Agricultural University<br>基于深度学习的鱼群密度估计方法研究<br>张松<br>中国农业大学 |
| **14:40-15:00** | **Near Infrared Spectroscopy Prediction of Available Nitrogen Content in Vermiculite Matrix of Desert Protected Agriculture**<br>**Pengfei Zhao**<br>Tarim University<br>沙漠设施农业蛭石基质速效氮含量近红外光谱预测<br>赵鹏飞<br>塔里木大学 |

| | |
|---|---|
| **15:00-15:20** | **Research on Spectroscopy and Spectral Imaging for Seed Quality Evaluation**<br>**Le Zhang**<br>Beijing Technology and Business University<br>农作物种子品质光谱及光谱成像评价<br>张乐<br>北京工商大学 |
| **15:20-15:40** | **A Novel Green Fruit Detection Algorithm Based on D2D Framework**<br>**Jinmeng Wei**<br>Shandong Normal University<br>一种基于 D2D 框架的绿色水果检测算法<br>魏金梦<br>山东师范大学 |
| **15:40-16:00** | **Use Lightweight Neural Network to Realize Disease Identification and Deployment**<br>**Xianghui Xie**<br>Gannan Normal University<br>利用轻量级神经网络实现病害识别与部署<br>谢湘慧<br>赣南师范大学 |
| **Moderator: Associate Prof. Jincun Liu**<br>主持人：刘金存 副教授 | |
| **16:20-16:40** | **Identification of Tomato Leaf Diseases Using Convolutional Neural Network with Multi-scale and Feature Reuse**<br>**Peng Li**<br>South China Agricultural University<br>基于多尺度和特征复用卷积神经网络的番茄叶片病害识别<br>李鹏<br>华南农业大学 |
| **16:40-17:00** | **Research of Machine Learning Algorithm to Predict Canopy Temperature of Brassica Chinensis**<br>**Mingxin Yang**<br>South China Agricultural University<br>基于机器学习的菜心冠层温度研究<br>杨明欣 |

| | |
|---|---|
| | 华南农业大学 |
| **17:00-17:20** | **Implementation of Agricultural Question Answering System Based on Knowledge Graph**<br>**Bokai Zhang**<br>China Agricultural University<br>**基于知识图谱的农技智能问答系统实现**<br>**张博凯**<br>中国农业大学 |
| **17:20-17:40** | **Intel D435i Depth Camera Data Acquisition and Depth Map Optimization**<br>**Jinsong Li**<br>China Agricultural University<br>**Intel d435i 深度相机数据采集及深度图像优化研究**<br>**李劲松**<br>中国农业大学 |
| **17:40-17:50** | **Embedded Atificial Intelligence Curriculum Design and Laboratory Construction**<br>**Mr. Song Zhao**<br>Huaqing Vision Education Group<br>**嵌入式人工智能课程设计与实验室建设**<br>**赵松 经理**<br>华清远见教育集团 |
| **17:50-18:00** | **Construction and Application of Measuring Instruments in Artificial Intelligence Laboratory**<br>**Mr. Zeyuan Wu**<br>Fujian Lilipu Optoelectronics Technology Co., Ltd.<br>**测量仪器在人工智能实验室的建设与运用**<br>**吴泽源 经理**<br>福建利利普光电科技有限公司 |