
东南大学自动化学院

1.

1.1

1.2

School of Automation

1.3

2023

1.5 1.5

1

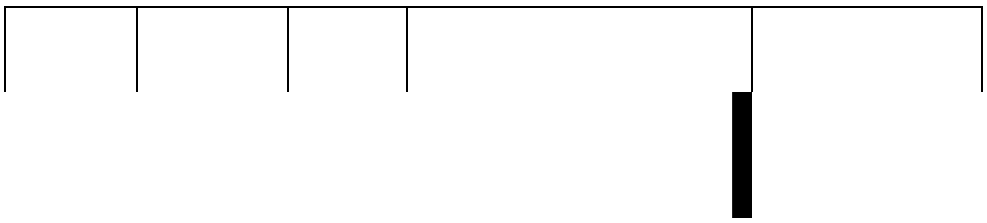
“ Lab ” “

”

“ ”

2.

2.1



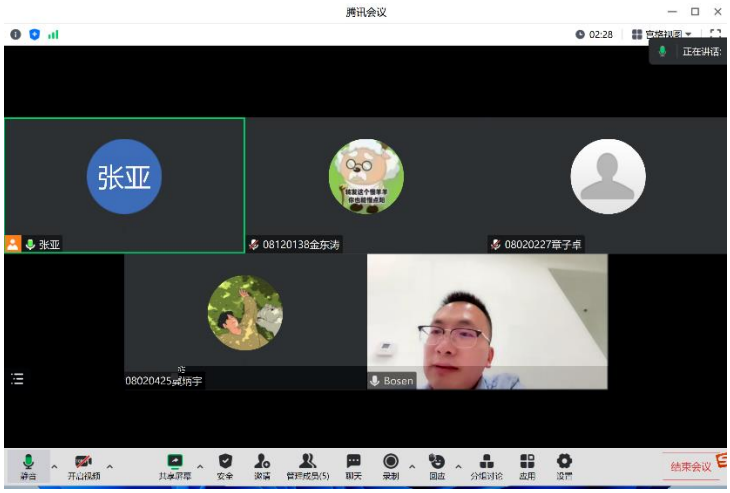
2.3

3.

8

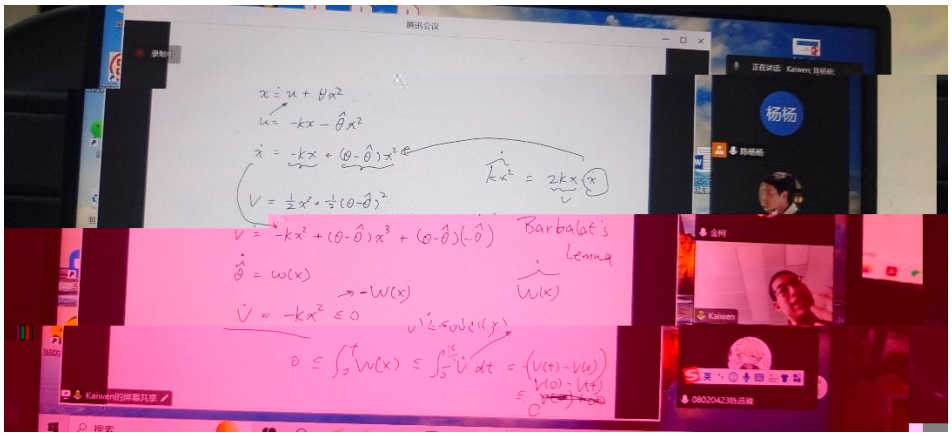
idea

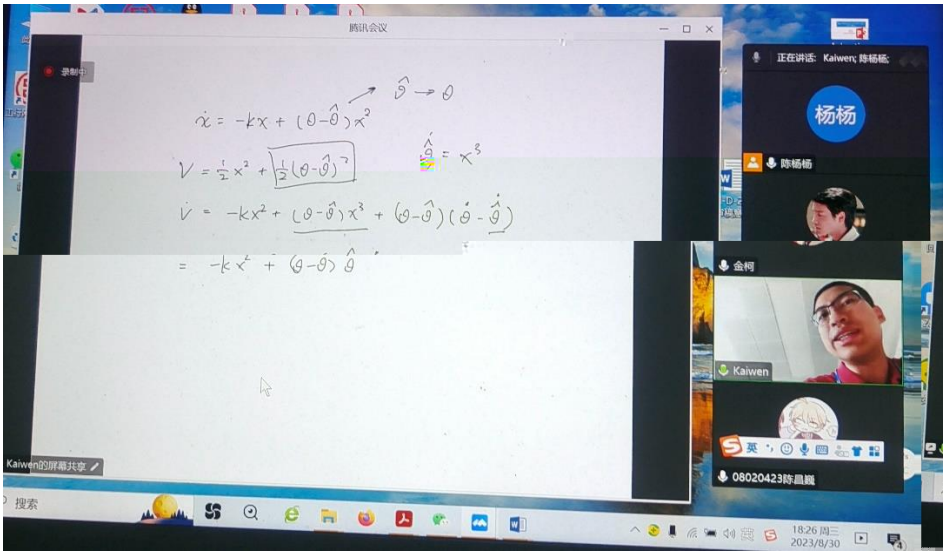
1


腾讯会议
02:28
正在讲话:
张亚
张亚
08120138金东涛
08020227章子卓
08020425臧炳宇
Bosen
静音
开启视频
共享屏幕
安全
邀请
管理成员(5)
聊天
录制
回应
分组讨论
应用
设置
结束会议

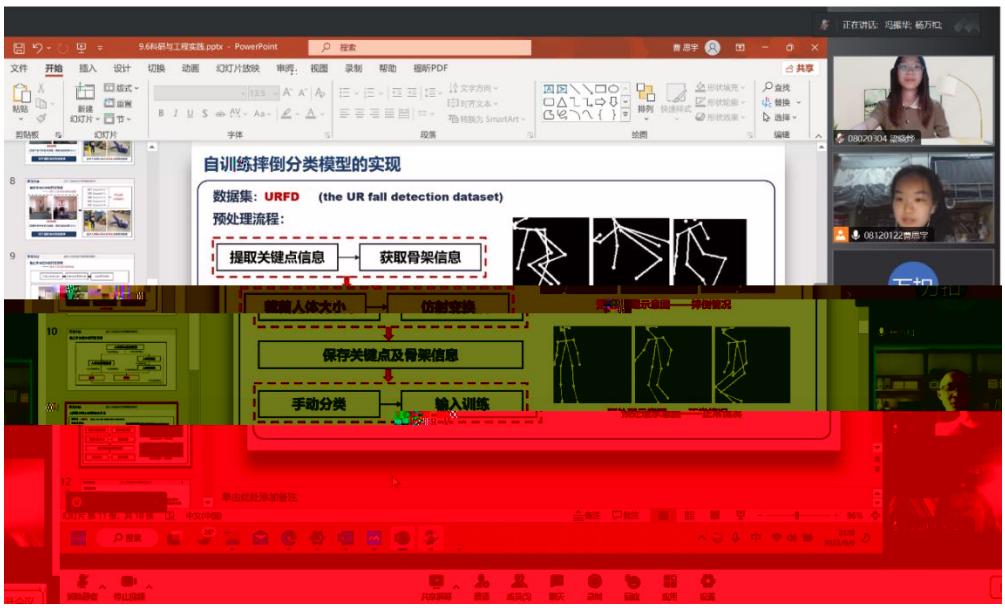
2

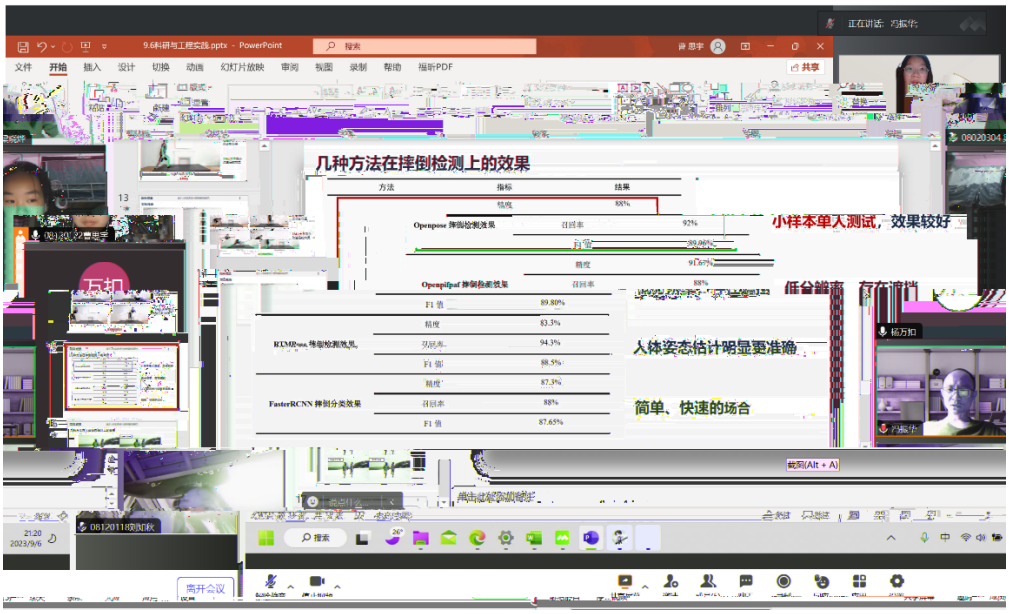
3




腾讯会议
正在讲话：Kaiwen; 陈杨杨;
杨杨
陈杨杨
金柯
Kaiwen
08020423陈昌巍
Kaiwen的屏幕共享
搜索
18:26 周三
2023/8/30

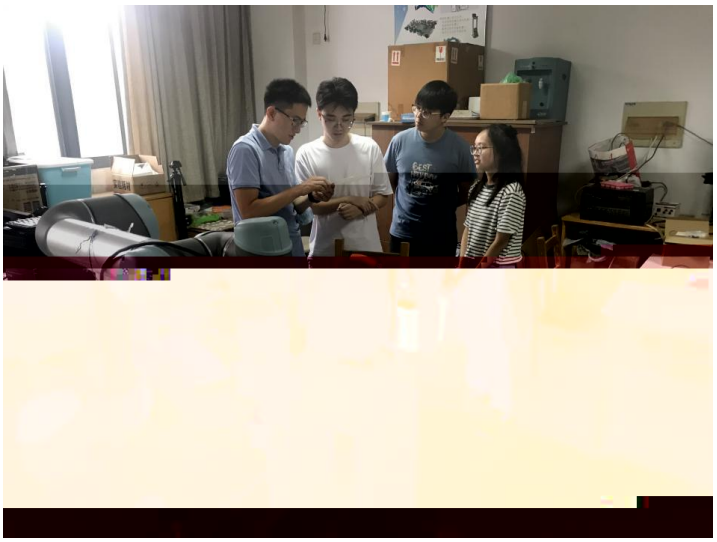
4


自训练摔倒分类模型的实现
数据集：URFD (the UR fall detection dataset)
预处理流程：
提取关键点信息
获取骨架信息
保存关键点及骨架信息
手动分类
输入训练

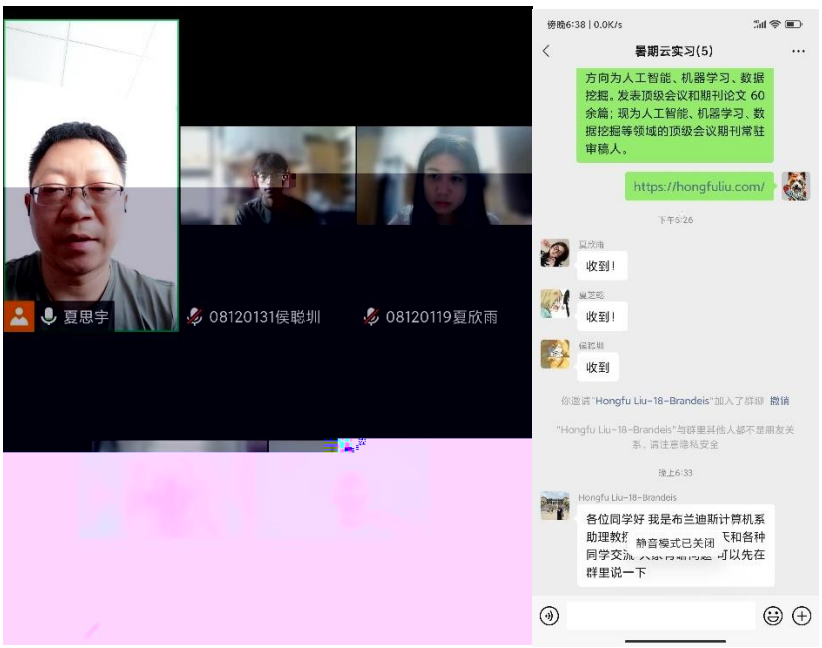


5

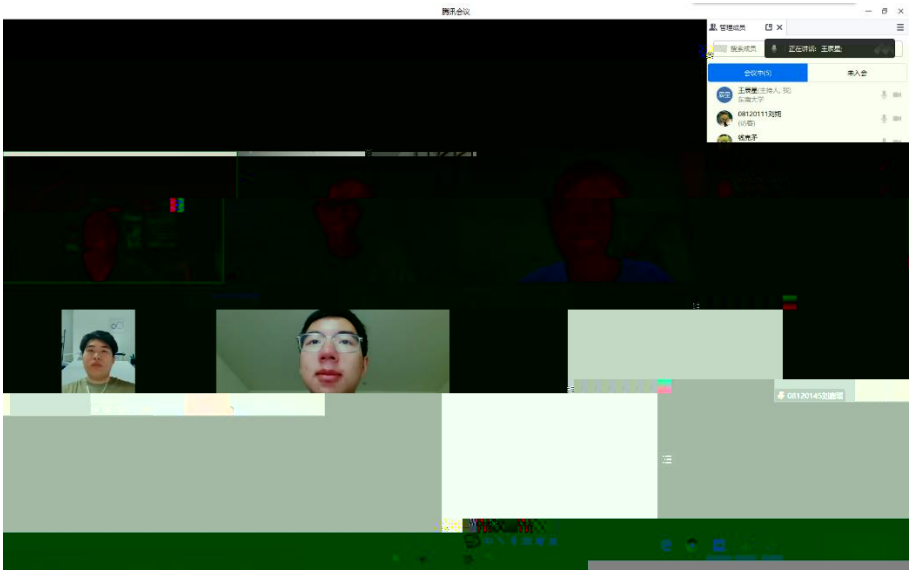
Shan Luo, King's College London

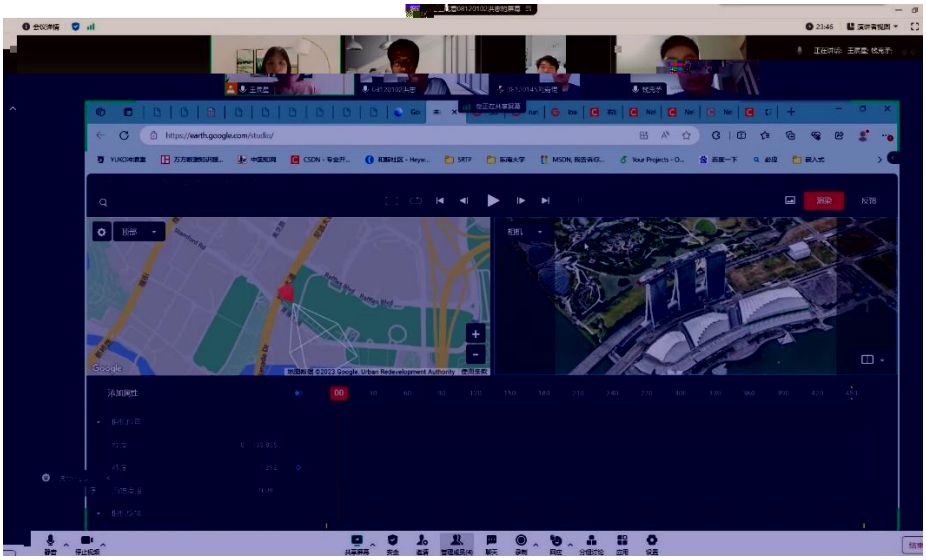


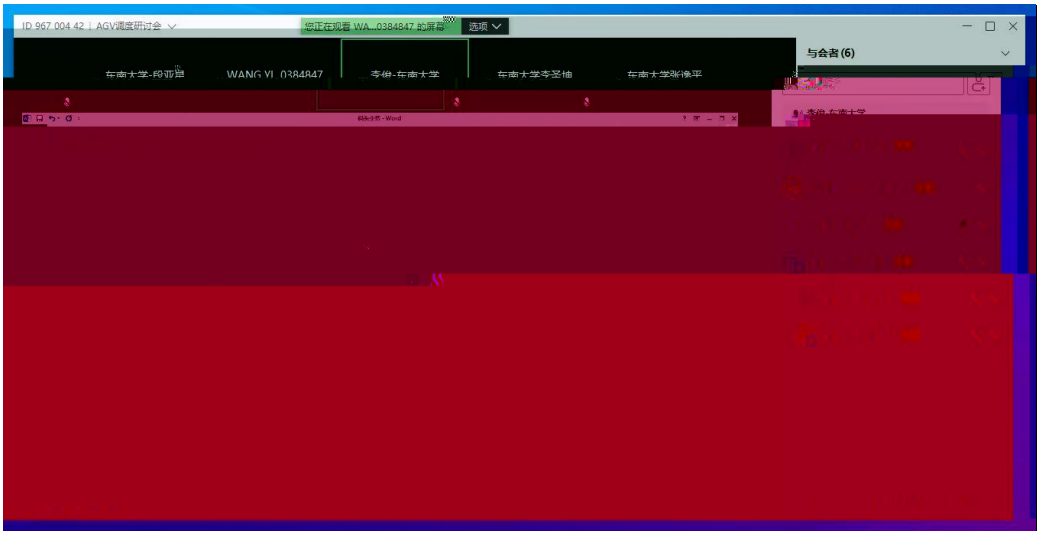
6

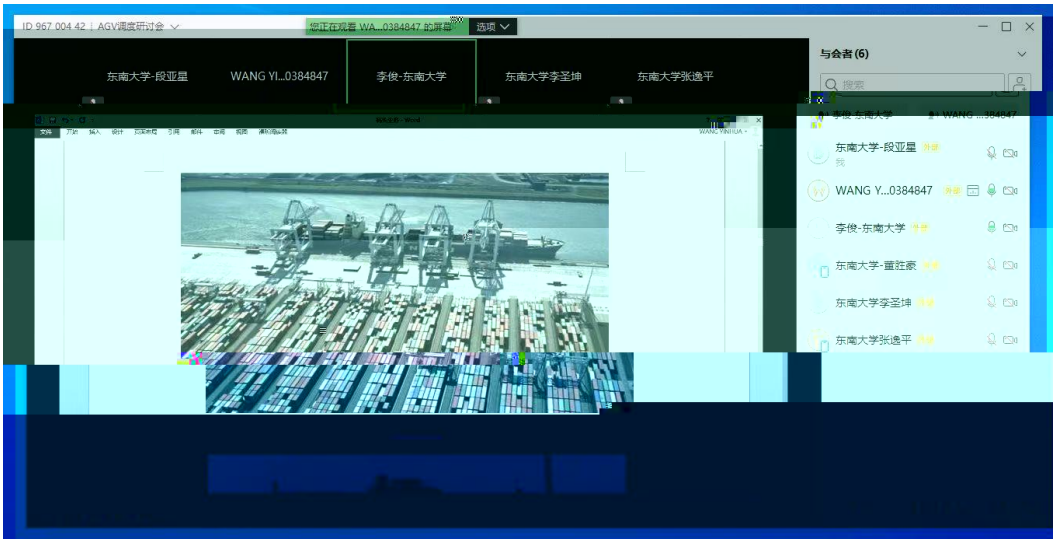

夏思宇
08120131侯聪圳
08120119夏欣雨
傍晚6:38 | 0.0K/s
暑期云实习(5)
方向为人工智能、机器学习、数据挖掘。发表顶级会议和期刊论文 60 余篇；现为人工智能、机器学习、数据挖掘等领域的顶级会议期刊常驻审稿人。
https://hongfuliu.com/
下午5:26
收到！
收到！
收到
你邀请"Hongfu Liu-18-Brandeis"加入了群聊 撤销
"Hongfu Liu-18-Brandeis"与群里其他人都不是朋友关系，请注意隐私安全
晚上6:33
Hongfu Liu-18-Brandeis
各位同学好 我是布兰迪斯计算机系助理教授 飞和各种同学交流
静音模式已关闭
可以先在群里说一下

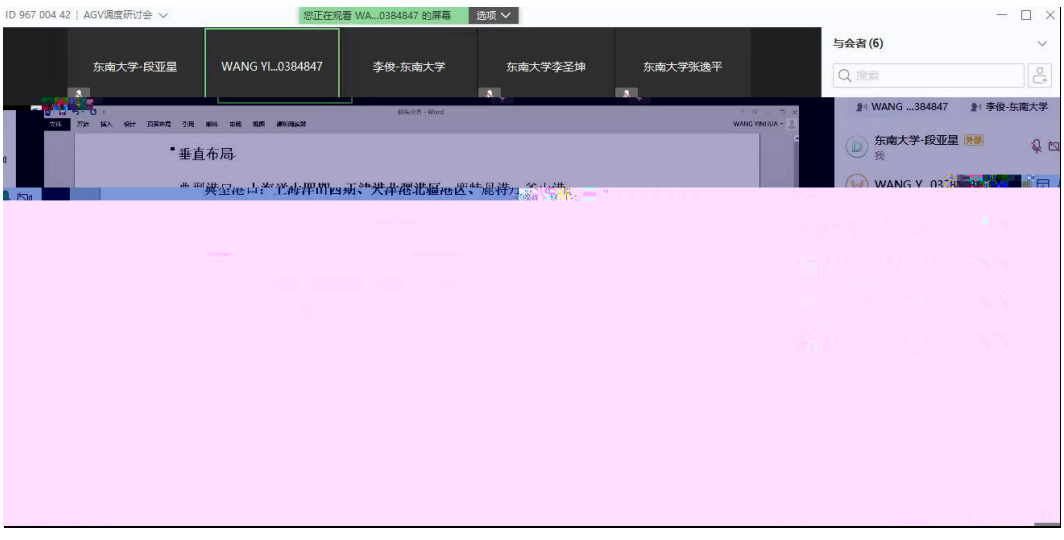
7








ID 967 004 42 | AGV调度研讨会
您正在观看 WA...0384847 的屏幕
选项
东南大学-段亚星
WANG YI...0384847
李俊-东南大学
东南大学李圣坤
东南大学张逸平
与会者 (6)


ID 967 004 42 | AGV调度研讨会
您正在观看 WA...0384847 的屏幕
选项
东南大学-段亚星
WANG YI...0384847
李俊-东南大学
东南大学李圣坤
东南大学张逸平
与会者 (6)
垂直布局

云烟 09-08 11:27:10

本次暑期实践课程已经进入尾声，我们小组的实习内容是三维人脸重建暑期国际学校项目，这也与我今后可能的研究方向较为契合。

在这次实习过程中，通过对基于传统方法和基于深度学习方法的三维重建进行深入细致的调研，我们对计算机视觉尤其是三维重建领域有了进一步的认识。通过多次线下、线上与老师的沟通交流，也让我逐步熟练科研实践的整个过程，为我今后完成毕业设计乃至研究生阶段的学习打下良好的基础。与海外刘教授线上交流，也让我对目前有关机器学习以及计算机视觉领域的国内外研究现状有了初步的认识。刘教授对有关国内外求学、研究以及就

4.

1

CMU

David Parkes Barbara Grosz

William F. Ballhaus, Jr. IJCAI'15

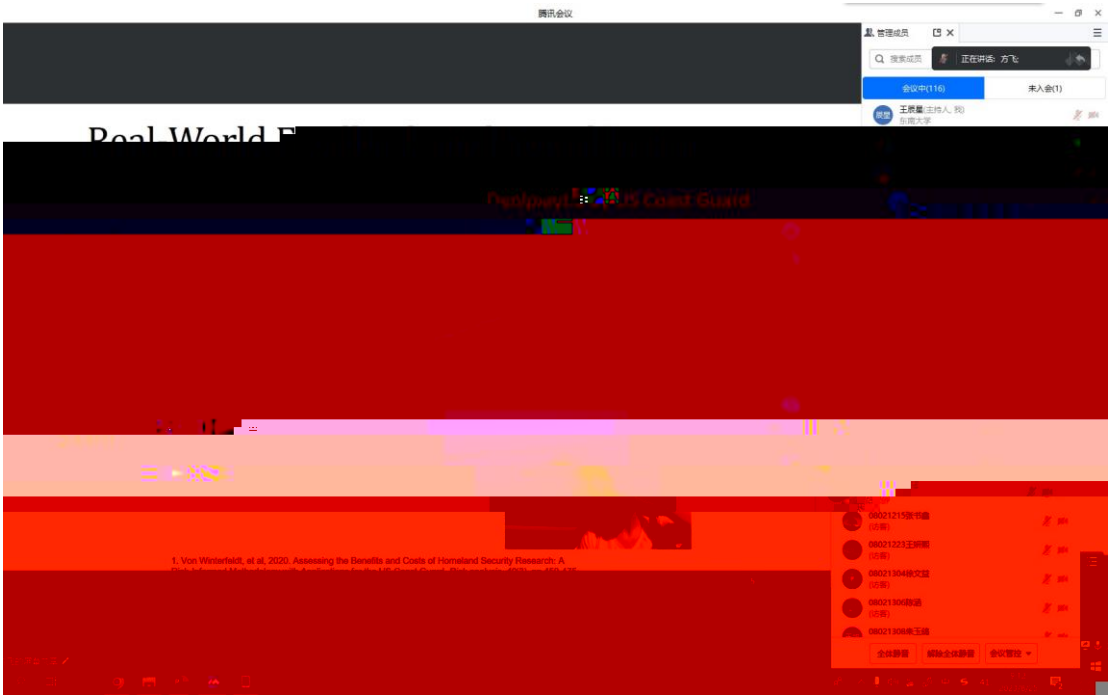
IAAI'16 IFAAMAS-16 Victor Lesser

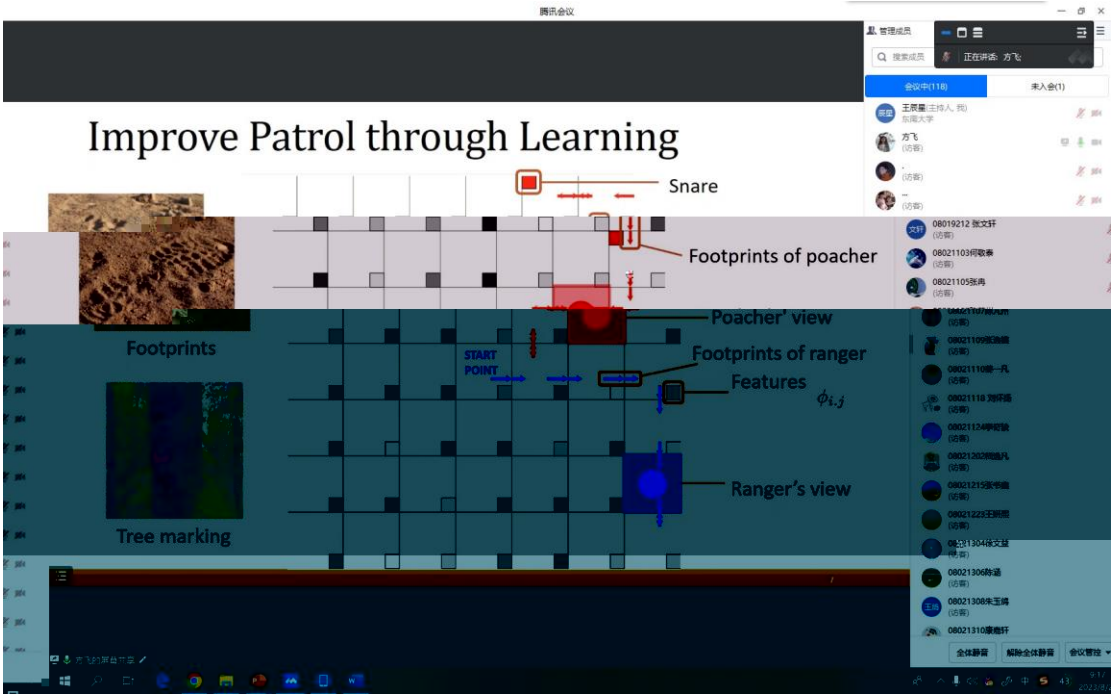
IJCAI-ECAI'18 AAAI'21 2020

IEEE Intelligent Systems IJCAI-21

2021 NSF CAREER AWARD 2022

AI for Social Good


腾讯会议
管理成员
正在讲话: 方飞
会议中(116)
未入会(1)
1. Von Winterfeldt, et al. 2020. Assessing the Benefits and Costs of Homeland Security Research: A

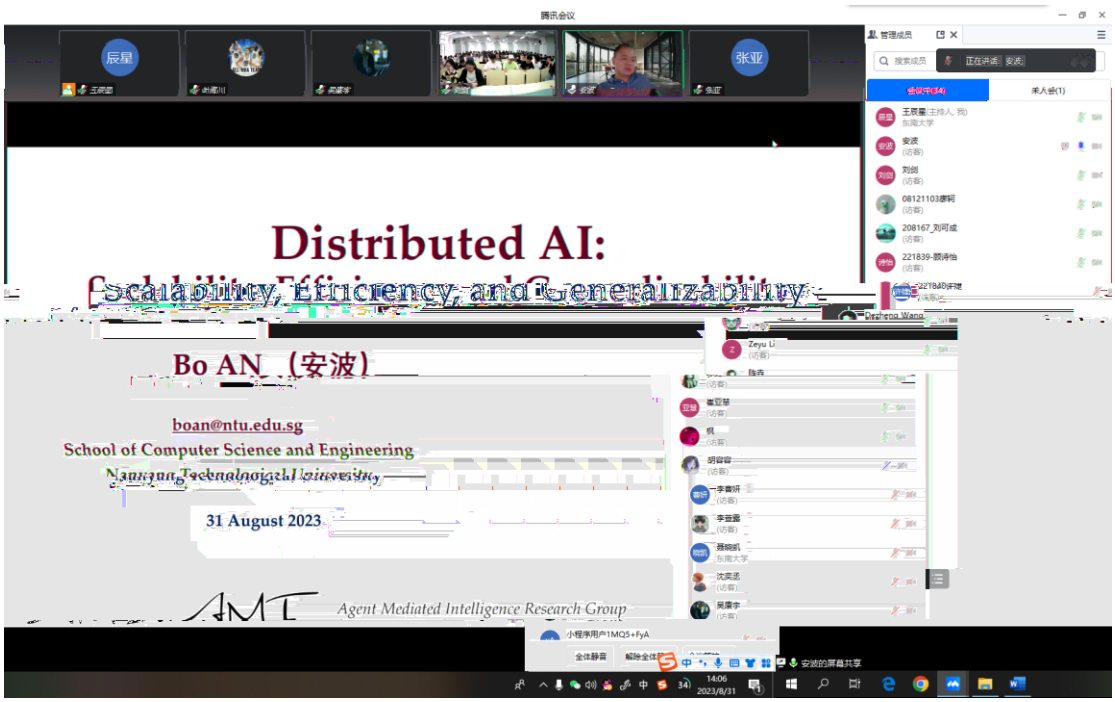

腾讯会议
管理成员
正在讲话: 方飞
会议中(118)
未入会(1)
Improve Patrol through Learning
Snare
Footprints of poacher
Poacher' view
Footprints
START POINT
Footprints of ranger
Features $\phi_{i,j}$
Ranger's view
Tree marking

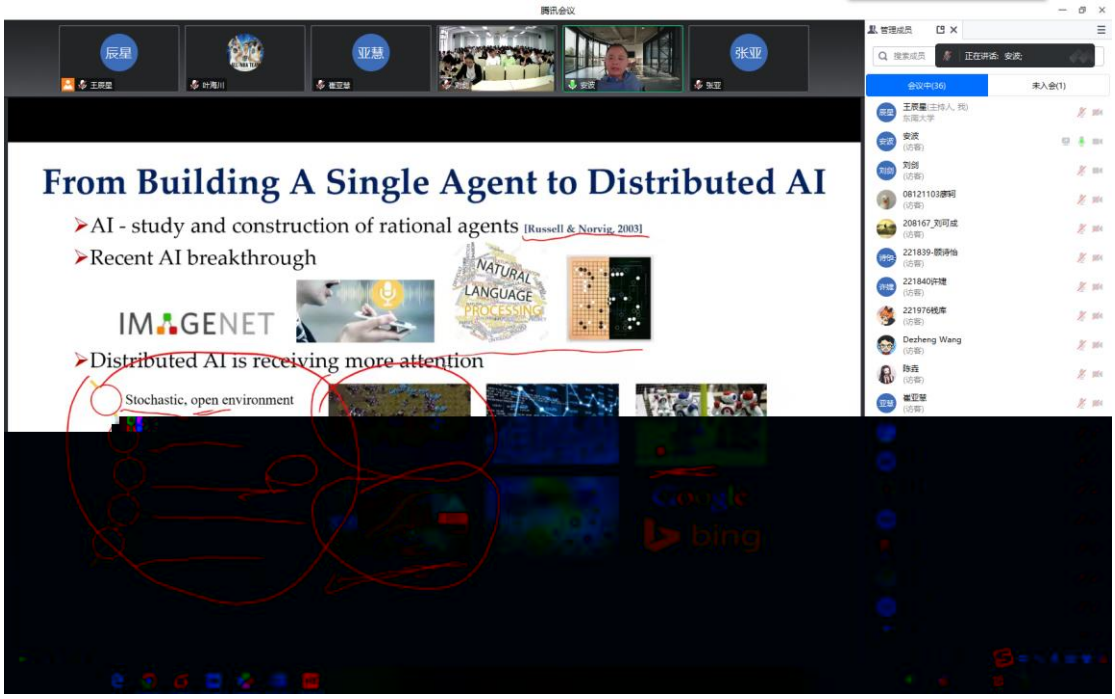
(NTU)

2011 Amherst

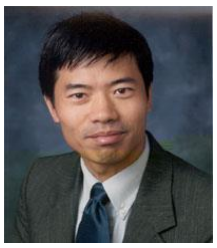
100

AAMAS IJCAI AAAI ICAPS KDD UAI EC WWW ICLR NeurIPS ICML AISTATS 2010 IFAAMAS 2011 2012 AAMAS 2016 IAAI 2020 DAI 2012 (INFORMS)Daniel H. Wagner 2018 2022 2017 IJCAI Early Career Spotlight talk 2017 AI 2018 IEEE Intelligent Systems AI s 10 to Watch AIJ JAAMAS IEEE Intelligent Systems ACM TIST ACM TAAS JAIR AAMAS 20 AAMAS 23 AAAI ACM


腾讯会议
Distributed AI:
Scalability, Efficiency, and Generalizability
Bo AN（安波）
boan@ntu.edu.sg
School of Computer Science and Engineering
Nanyang Technological University
31 August 2023
Agent Mediated Intelligence Research Group


腾讯会议
From Building A Single Agent to Distributed AI
AI - study and construction of rational agents [Russell & Norvig, 2003]
Recent AI breakthrough
IMAGENET
NATURAL LANGUAGE PROCESSING
Distributed AI is receiving more attention
Stochastic, open environment

3



1983

1986 1990

2013

Petri /

1100 14 750+ (600+ IEEE transactions)

31 32 2012

Web of Science top one h-index 124 Google

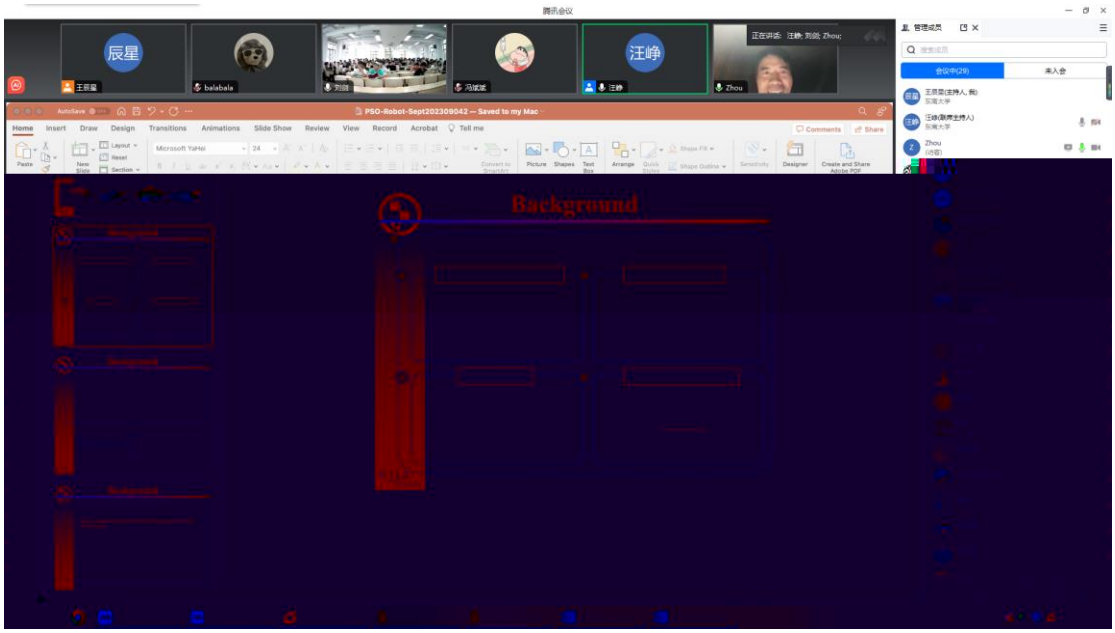
61800 2022 Research.com 1000

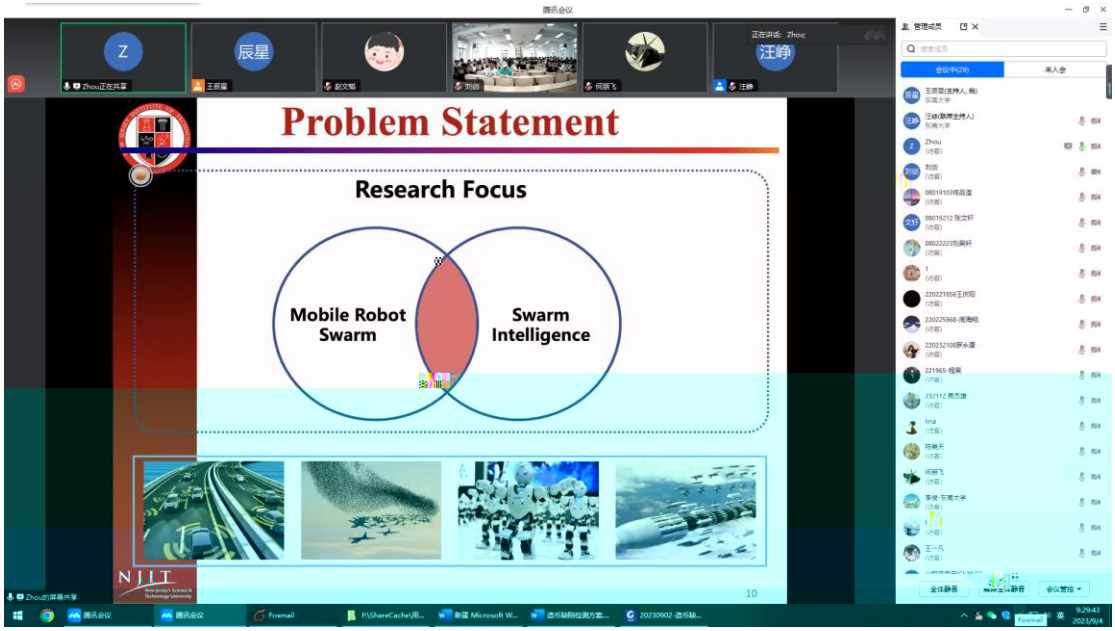
89 58 NJIT

V.

1999 IEEE Fellow, IFAC Fellow, AAAS Fellow, CAA Fellow and NAI Fellow


Particle Swarm Optimizers with Mobile Robots: A Novel Paradigm for Effective Optimization
MengChu Zhou, Ph.D. & Distinguished Professor
Fellow of IEEE, IFAC, AAAS, CAA and NAI
New Jersey Institute of Technology
(Top 50 National Public University, U.S. News & World Report;
zhou@njit.edu


腾讯会议
辰星
balabala
汪峥
Zhou
PSO-Robot-Sept202309042 — Saved to my Mac
Background


腾讯会议
Z
辰星
汪峥
Problem Statement
Research Focus
Mobile Robot Swarm
Swarm Intelligence
NJIT
10

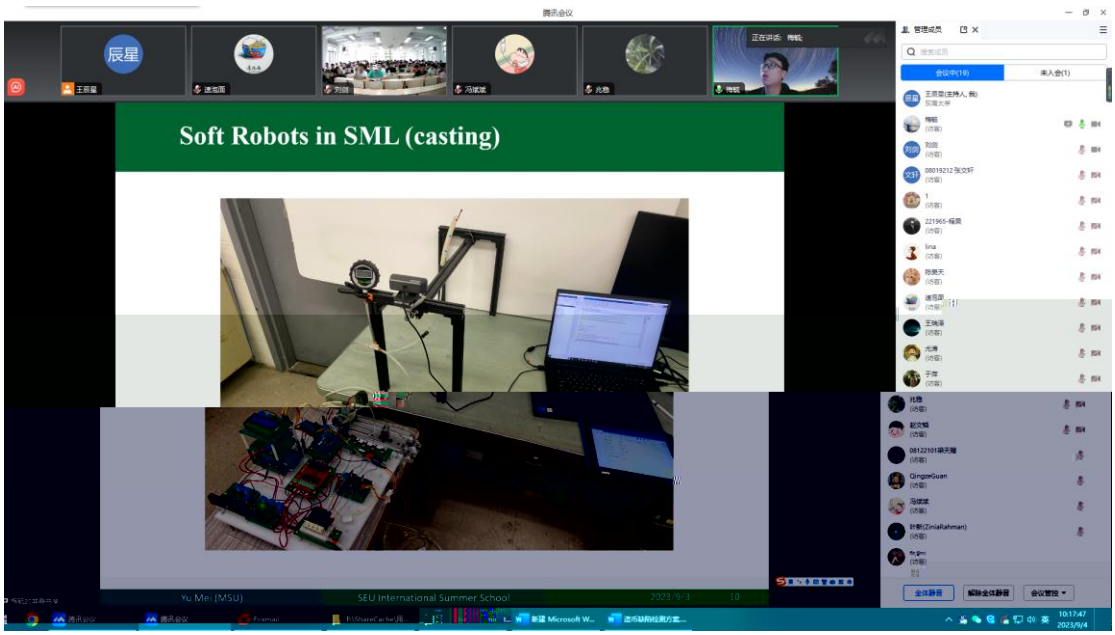
4

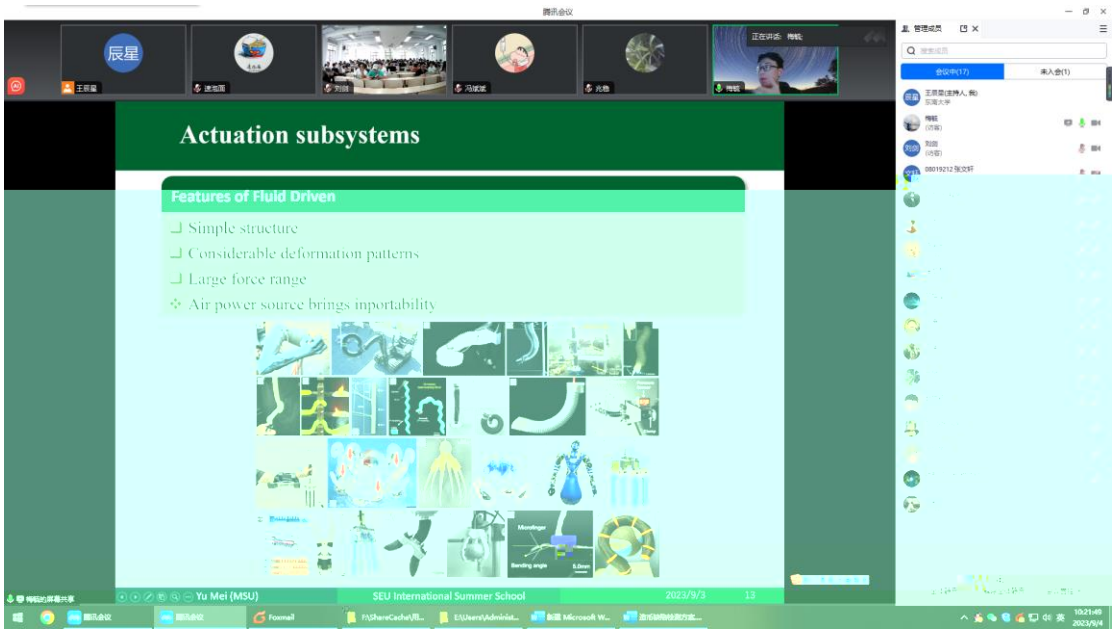
2020 2020

2021

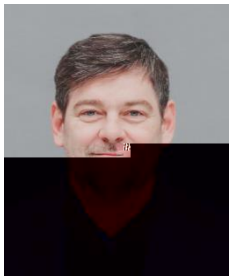
MSU

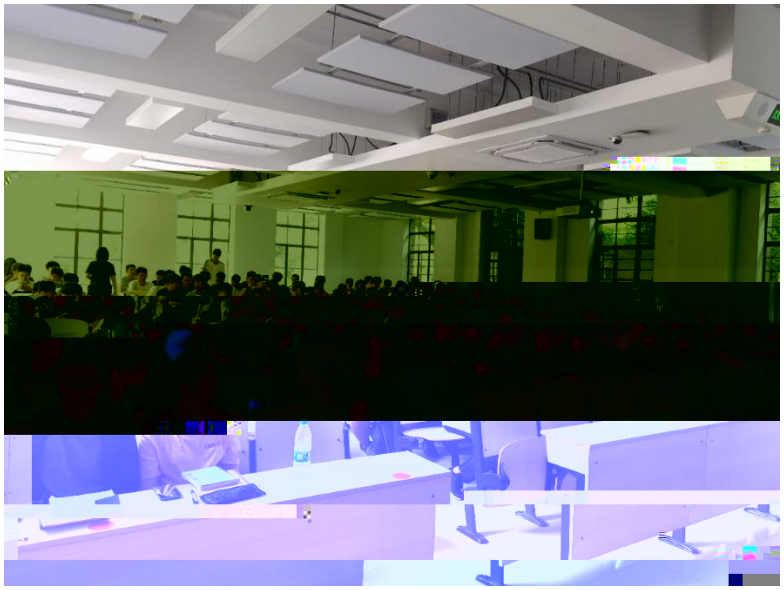
2020 2021


Soft Robots in SML (casting)
Yu Mei (MSU)
SEU International Summer School
2023/9/3
10


Actuation subsystems
Features of Fluid Driven
Simple structure
Considerable deformation patterns
Large force range
Air power source brings inportability
Yu Mei (MSU)
SEU International Summer School
2023/9/3
13

5





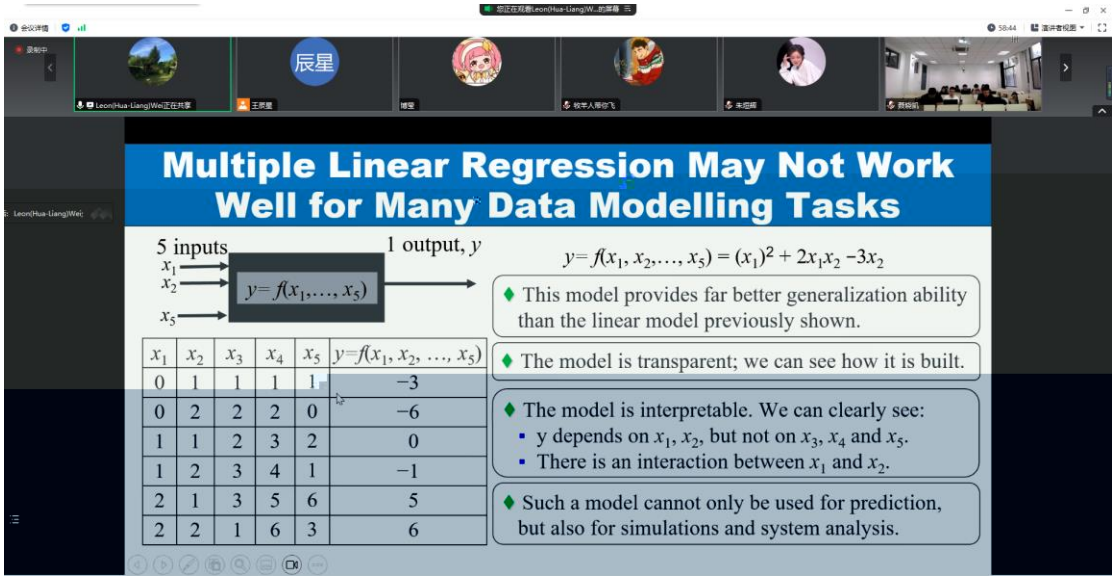

23/09/07 14:24:05四
Bosch - A Top Employer In China

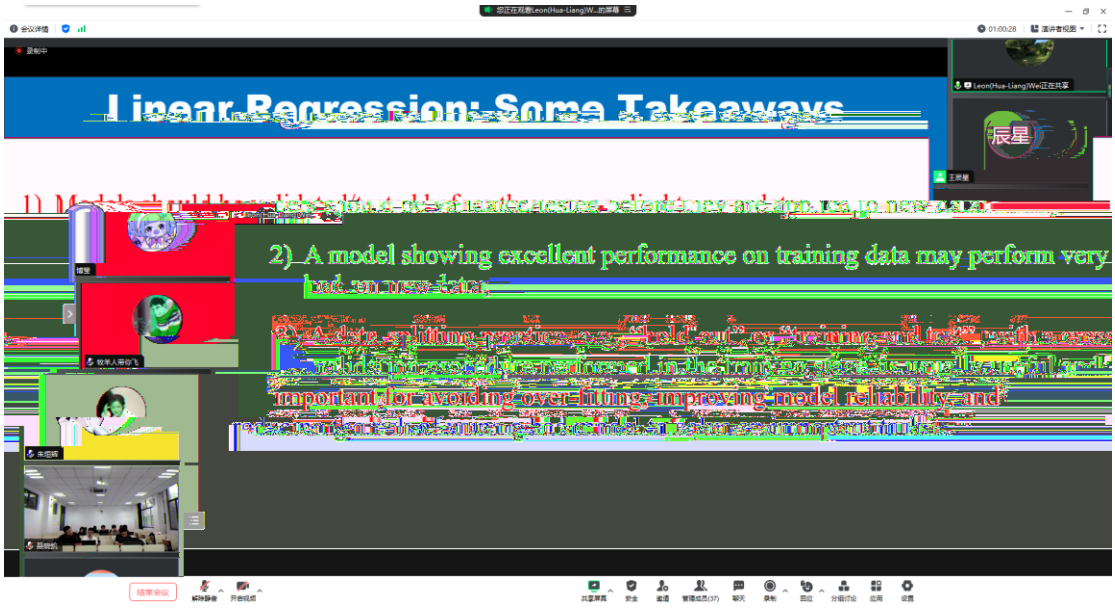
6

2004

Stephen A. Billings

, 600


Multiple Linear Regression May Not Work Well for Many Data Modelling Tasks
5 inputs
x_1
x_2
x_5
$y = f(x_1, \ldots, x_5)$
1 output, y
$y = f(x_1, x_2, \ldots, x_5) = (x_1)^2 + 2x_1x_2 - 3x_2$
This model provides far better generalization ability than the linear model previously shown.
The model is transparent; we can see how it is built.
The model is interpretable. We can clearly see:
y depends on x_1, x_2, but not on x_3, x_4 and x_5.
There is an interaction between x_1 and x_2.
Such a model cannot only be used for prediction, but also for simulations and system analysis.
x_1 x_2 x_3 x_4 x_5 $y = f(x_1, x_2, \ldots, x_5)$
0 1 1 1 1 −3
0 2 2 2 0 −6
1 1 2 3 2 0
1 2 3 4 1 −1
2 1 3 5 6 5
2 2 1 6 3 6


Linear Regression: Some Takeaways
2) A model showing excellent performance on training data may perform very
important for avoiding over-fitting, improving model reliability, and

7

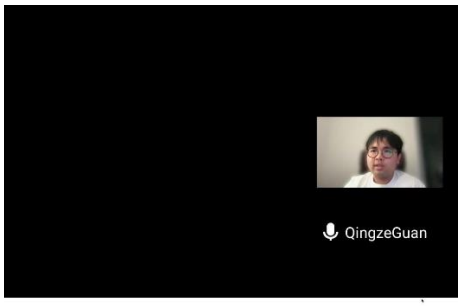
2006

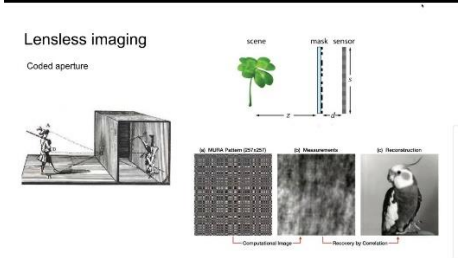
4.0 20 4.0 6
30
EduNet EduNet 100
xplore


使命引领
为每个时代给出答案


菲尼克斯与东南大学22年合作

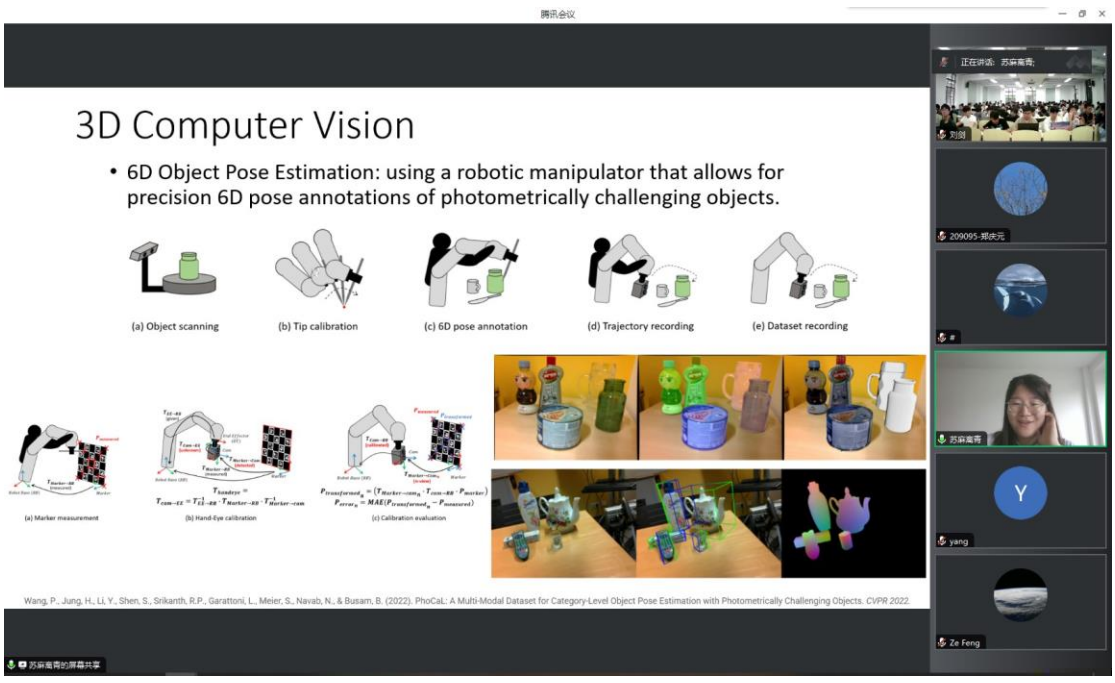
8

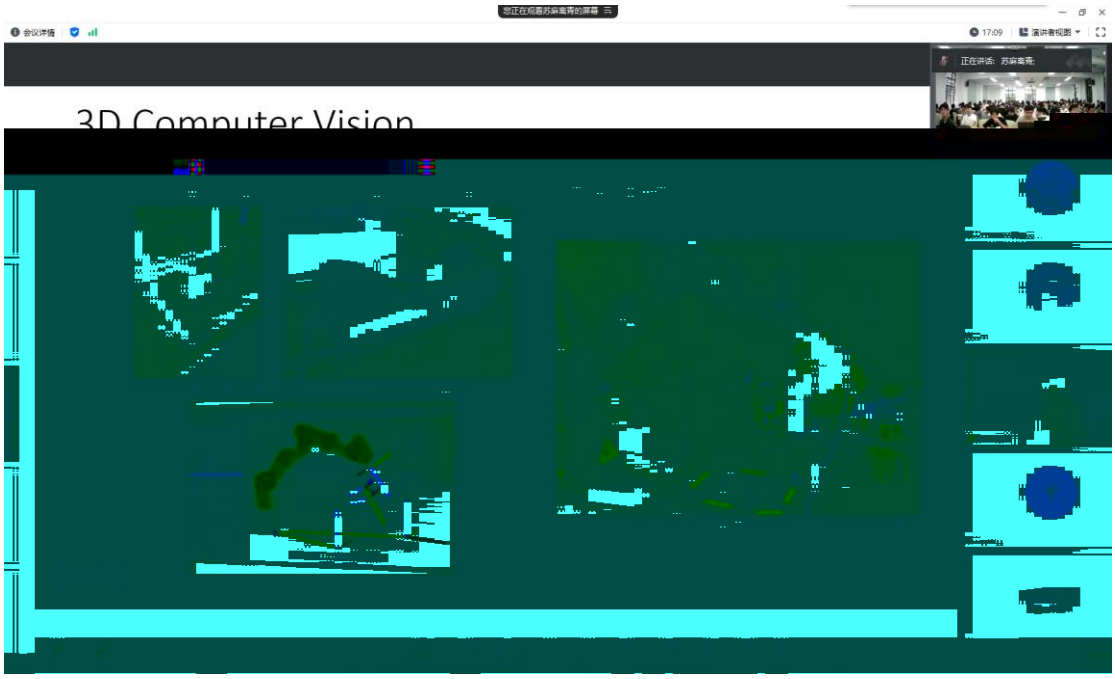

QingzeGuan

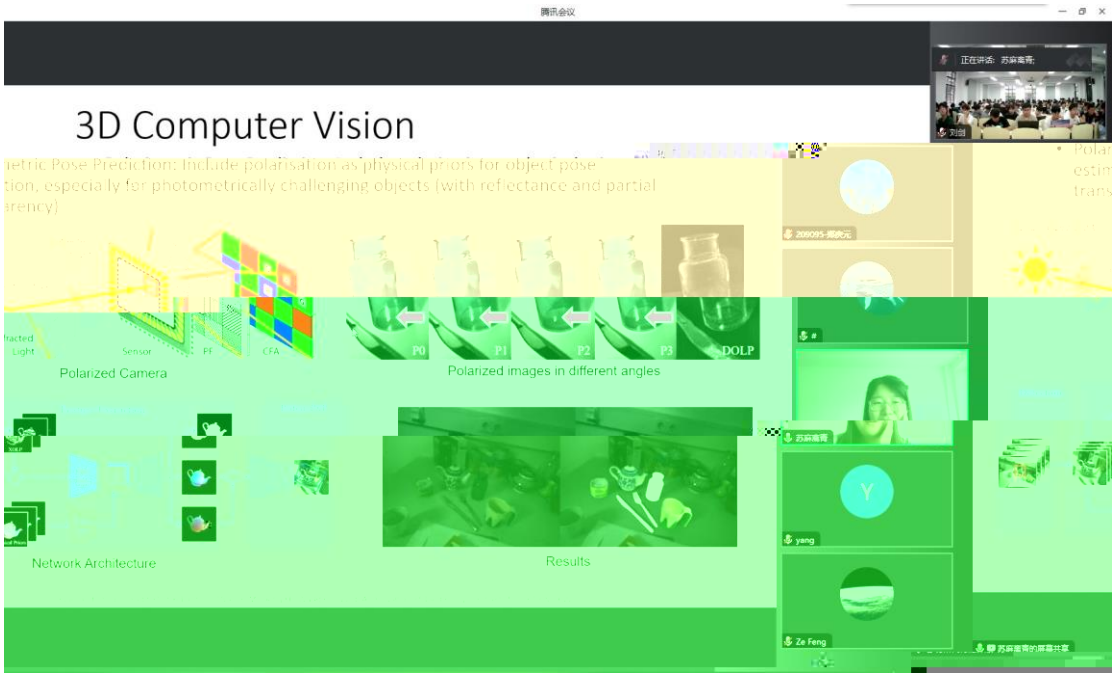

Lensless imaging
Coded aperture
scene
mask
sensor
Computational Image
Recovery by Correlation


QingzeGuan的屏幕共享

9


腾讯会议
3D Computer Vision
• 6D Object Pose Estimation: using a robotic manipulator that allows for precision 6D pose annotations of photometrically challenging objects.
(a) Object scanning
(b) Tip calibration
(c) 6D pose annotation
(d) Trajectory recording
(e) Dataset recording
(a) Marker measurement
(b) Hand-Eye calibration
(c) Calibration evaluation
Wang, P., Jung, H., Li, Y., Shen, S., Srikanth, R.P., Garattoni, L., Meier, S., Navab, N., & Busam, B. (2022). PhoCaL: A Multi-Modal Dataset for Category-Level Object Pose Estimation with Photometrically Challenging Objects. CVPR 2022.
正在讲话: 苏麻喜雨,
刘洞
209095-郑庆元
苏麻喜雨
yang
Ze Feng
苏麻喜雨的屏幕共享


3D Computer Vision


3D Computer Vision
Polarized Camera
Polarized images in different angles
Network Architecture
Results