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## 曹明伟

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基本信息				
姓名	曹明伟	性别	男	
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出生年月	1986年5月	学位	博士	
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招生专业代码	计算机科学与技术(0812)	导师类别		硕士生导师
研究方向	三维重建(SFM, SLAM), 计算机视觉, 人工智能 (欢迎感兴趣的学生与我联系)			
个人简介				

曹明伟分别于2014年4月和2017年6月获得合肥工业大学、计算机软件与理论专业硕士学位和计算机应用技术专业博士学位(有博士后经历)。目前以第一作者身份在IEEE Transactions on Industrial Informatics, IEEE Transactions on Intelligent Transportation Systems, Image and Video Computing等国际期刊和计算机学报等国内期刊发表和录用论文30余篇。申请和授权发明专利15项。独立开发4套三维重建系统,已经被多家企业所采用。实现了多视图几何领域的各种算法,构造了具有15万行代码的基础算法库(libcvg,部分代码已经开源)。担任IEEE Transactions on Industrial Informatics, IEEE Transactions on Intelligent Transportation Systems, IEEE Transactions on Circuits and Systems for Video Technology, ISPRS Journal of Photogrammetry and Remote Sensing, Image and Vision Computing, IEEE Consumer Electronics Magazine, IEEE ACCESS, Multimedia Tools and Applications, Neural Computing and Applications, Neural Computing, Computers & Electrical Engineering, IEEE Sensors Journal, Remote Sensing, IET Image Processing, Signal Processing: Image Communication, International Journal on Artificial Intelligence Tools, Computer Communication和计算机学报等20余个期刊的审稿人。同时,他也是IEEE会员,中国计算机学会会员,中国人工智能学会机器智能专委会委员,中关村数智人工智能产业联盟数字人工作委员会会员。

## 部分论文

1. **Mingwei Cao**, Liping Zheng, Wei Jia, Huimin Lu, Xiaoping Liu. Accurate 3-D Reconstruction Under IoT Environments and Its Applications to Augmented Reality[J]. IEEE Transactions on Industrial Informatics, 2021, 17(3): 2090-2100.
2. **Mingwei Cao**, Liping Zheng, Wei Jia, Xiaoping Liu. Joint 3D Reconstruction and Object Tracking for Traffic Video Analysis Under IoV Environment[J]. IEEE Transactions on Intelligent Transportation Systems, 2020, Accept, DOI: 10.1109/TITS.2020.2995768.
3. **Mingwei Cao**, Liping zheng, Wei Jia, Xiaoping Liu. Fast incremental structure from motion based on parallel bundle adjustment[J]. Journal of Real-Time Image Processing, 2020, Accept, DOI: 10.1007/s11554-020-00970-3.
4. **Mingwei Cao**, Hao Gao, Wei Jia. Parallel Surface Reconstruction for Large-Scale Scenes in The Wild[J]. International Journal of Circuit Theory and Applications, 2021, Accept, DOI: 10.1002/CTA.2953.
5. **Mingwei Cao**, Wei Jia, Yang Zhao, Shujie Li, Xiaoping Liu. Fast and robust absolute camera pose estimation with known focal length[J]. Neural Computing & Applications, 2017, 28(3):1-16.
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12. **Mingwei Cao**, Wei Jia, Zhihan Lv, Liping Zheng, Xiaoping Liu. Superpixel-Based Feature Tracking for Structure from Motion[J]. Applied Sciences, 2019, 9(15): 2961-2982.
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15. Youcheng Cai, **Mingwei Cao**, Lin Li, Xiaoping Liu. An End-to-End Approach to Reconstructing 3D Model From Image Set[J]. IEEE Access, 2020, 8(10): 193268-193284.
16. **Mingwei Cao**, Liping Zheng, Wei Jia, Xiaoping Liu. Real-time video stabilization via camera path correction and its applications to augmented reality on edge devices[J]. Computer Communications, 2020, 158(8): 104-115.
17. **Mingwei Cao**, Wei Jia, Shuijie Li, Yujie Li, Liping Zheng, Xiaoping Liu. GPU-accelerated feature tracking for 3D reconstruction[J]. Optics & Laser Technology, 2019, 110(3): 165-175.
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20. **Mingwei Cao**, Liping Zheng, Wei Jia, Xiaoping Liu. Constructing big panorama from video sequence based on deep local feature[J]. Image and Vision Computing, 2020, 101: 103972-103872.
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## 在研项目

- [1] 中国博士后国际交流派出项目，2019/05月至现在，30万，在研，主持
- [2] 国家自然科学基金，基于运动推断结构的室内动态场景重建关键问题研究，2019/01-2021/12，21万，在研，主持
- [3] 国家自然科学基金，面向配对数据受限的单图像深度学习去雨关键技术，2021/01至2024/12，58万元，在研，参加
- [4] 国家自然科学基金，全4K视频视觉质量增强关键技术研究，2020/01至2023/12，58万元，在研，参加
- [5] 国家自然科学基金，多约束Power图快速计算算法研究，2020/01至2023/12，58万元，在研，参加

奖励情况	2014年CACIS会议最佳论文奖
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## 师资队伍

导师介绍

系别教师

学科方向

退休教职工