Bin Wang

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EDUCATION

Shandong University   **Jinan, China**
Ph.D Candidate (Joint Master-Doctor Program) in Computer Science   2012/9 – (Expected) 2018/6
- **GPA:** 91/100
- **Honors:** First-class Scholarship of Excellent Postgraduate in Shandong University (2014,2015,2016)
- **Relevant Coursework:** Computer Vision / Computer Graphics / Image Processing and Analysis / Machine Learning / Numerical Optimization

Shandong University   **Jinan, China**
Bachelor of Engineering in Software Engineering   2008/9 – 2012/6
- **GPA:** 86/100
- **Honors:** Second-class Scholarship of Excellent Student in Shandong University (2010,2011)

PUBLICATION

- **Bin Wang**, Fan Zhong, Xueying Qin. Pose Optimization in Edge Distance Field for Textureless 3D Object Tracking. In Proceedings of CGI'17, 2017.
- Guofeng Wang, **Bin Wang**, Fan Zhong, Xueying Qin, Baoquan Chen. Global Optimal Searching for Textureless 3D Object Tracking. The Visual Computer, 31(6-8):979-988, 2015.
- **Wang Bin**, Chen Wenzheng, Zhong Fan, Tu Changhe, Qin Xueying, Peng Qunsheng. RGB-D Video Segmentation via Geodesic Spatio-Temporal Propagation. Journal of Computer-Aided Design & Computer Graphics, 27(10):1816-1822, 2015. (in Chinese)

RESEARH EXPERIENCE

EDF 3D Tracker, the first author   2016/9 – 2017/6
- A monocular model-based 3D tracking method for textureless objects
- A novel energy function defined in edge distance field for 6DoF pose estimation
- Robust to partial occlusions, fast motions and cluttered backgrounds

GOS 3D Tracker, the second author   2014/9 – 2015/5
- A monocular model-based 3D tracking method for textureless objects
- A global optimal searching strategy for 3D-2D point correspondences used in minimization of the sum of reprojection errors
- Robust to cluttered backgrounds compared to the related local optimal searching method

RGB-D Segmentation, the first author   2013/9 – 2014/6
- A real-time RGB-D video segmentation method via geodesic spatio-temporal propagation
- Robust in case of moving camera or overlap between depth ranges of foreground and background compared to traditional methods based on depth statistics

SKILLS, ACTIVITIES & INTERESTS

Languages: Chinese Mandarin (native); English (fluent)
Programming: Experienced in C/C++ and Python; Familiar with Java
Library & Tool: Experienced in OpenCV, OpenGL and Caffe; Familiar with Git
Teaching Assistant: Digital Image Processing (2013); Augmented Reality DIY (2015)
Volunteer: SIGGRAPH Asia (2013, 2014)

王　斌

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教育背景

山东大学　　　　　　　　　　　　　　　　　　　　　　　　　　**济南，中国**
工学博士（硕博连读）　计算机科学与技术　　　　　　　　　　2012/9 -（预计）2018/6
- **GPA：** 91/100
- **相关课程：** 计算机视觉 ／ 计算机图形学 ／ 图像处理与分析 ／ 机器学习 ／ 优化理论与方法

山东大学　　　　　　　　　　　　　　　　　　　　　　　　　　**济南，中国**
工学学士　软件工程　　　　　　　　　　　　　　　　　　　　　2008/9 - 2012/6
- **GPA：** 86/100

学术论文

- **Bin Wang**, Fan Zhong, Xueying Qin. Pose Optimization in Edge Distance Field for Textureless 3D Object Tracking. In Proceedings of CGI'17, 2017.
- Guofeng Wang, **Bin Wang**, Fan Zhong, Xueying Qin, Baoquan Chen. Global Optimal Searching for Textureless 3D Object Tracking. The Visual Computer, 31(6-8):979-988, 2015.
- **Wang Bin**, Chen Wenzheng, Zhong Fan, Tu Changhe, Qin Xueying, Peng Qunsheng. RGB-D Video Segmentation via Geodesic Spatio-Temporal Propagation. Journal of Computer-Aided Design & Computer Graphics, 27(10):1816-1822, 2015. (in Chinese)

研究经历

EDF 3D Tracker，第一作者　　　　　　　　　　　　　　　　　　2016/9 - 2017/6
- 一种单目的基于模型的三维无纹理物体跟踪方法
- 新颖的定义在边距离场中的能量函数用以求解 6 自由度姿态参数
- 对部分遮挡、快速运动和复杂背景具有鲁棒性

GOS 3D Tracker，第二作者　　　　　　　　　　　　　　　　　　2014/9 - 2015/5
- 一种单目的基于模型的三维无纹理物体跟踪方法
- 全局最优搜索策略构建 3D-2D 点对应用以最小化重投影误差和
- 对复杂背景具有鲁棒性对比局部最优搜索方法

RGB-D Segmentation，第一作者　　　　　　　　　　　　　　　　2013/9 - 2014/6
- 一种实时 RGB-D 视频实时分割方法
- 帧间构建时空测地线传播图，使用泛化测地线距离变换将前一帧的分割结果传播到当前帧
- 对相机运动或前背景深度交叠具有鲁棒性对比基于深度统计的传统视频分割方法

技能和爱好

语　言：中文-母语；英语-流利
编　程：熟练 C/C++和 Python；了解 Java
工　具：熟练 OpenCV,OpenGL 和 Caffe；了解 Git
助　教：数字图像处理（2013）；增强现实实践（2015）
志愿者：SIGGRAPH Asia 2013（香港）；SIGGRAPH Asia 2014（深圳）