Hao Tian

East China Normal University | School of Software Engineering | Ph.D. Student

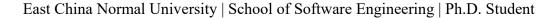## Personal Information

Phone：+86-13795494199   E-mail：nicktian.ecnu@gmail.com

Graduation Date：March 2020   Personal Website：https://hao-tian-ecnu.github.io/

Research Interests：Computer Graphics, Human-Computer Interaction, VR/AR, Robotics

Address: B231 Science Building, 3663 N. Zhongshan Rd., Shanghai, China

Education

- East China Normal University   Sep. 2014 – Present
  School of Software Engineering | Ph.D. Student
  Advised by Prof. Changbo Wang and Prof. Xinyu Zhang

- University of Maryland at College Park   Mar. 2018 – Mar. 2019
  Department of Computer Science | Visiting Scholar
  Advised by Prof. Dinesh Manocha

- East China Normal University   Sep. 2010 – Jul. 2014
  Software Engineering Institute | Bachelor

Publications

- **Transferring Grasp Configurations using Active Learning and Local Replanning [C]**.
  Hao Tian, Changbo Wang, Dinesh Manocha, Xinyu Zhang.
  2019 IEEE International Conference on Robotics and Automation (ICRA). (CCF-B)

- **Realtime Hand-Object Interaction using Learned Grasp Space for Virtual Environments [J]**.
  Hao Tian, Changbo Wang, Dinesh Manocha, Xinyu Zhang.
  2018 IEEE Transactions on Visualization and Computer Graphics (TVCG). (CCF-A, SCI)

- **Efficient Global Penetration Depth Computation for Articulated Models [J]**.
  Hao Tian, Xinyu Zhang, Changbo Wang, Jia Pan, Dinesh Manocha.
  Journal of Computer-Aided Design, 2016, 70: 116-125. (CCF-B, SCI)

- **Interactive Grasping for High-genus Objects using Configuration Space Learning [C]**.
  Hao Tian, Changbo Wang, Dinesh Manocha, Xinyu Zhang.
  2018 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS). (CCF-C, workshop)

- **A Realtime Virtual Grasping System for Manipulating Complex Objects [C]**.
  Hao Tian, Changbo Wang, Xinyu Zhang.
  2018 IEEE Conference on Virtual Reality and 3D User Interfaces (VR): 1-2. (CCF-A, poster)

- **SeLL: Second Language Learning Paired with VR and AI [C].**
  Juan Guo, Yu Chen, Qikai Pei, Hua Ren, Nan Huang, **Hao Tian**, Manni Zhang, Yao Liu, Guohe Fu, Huaqiang Hu, Xinyu Zhang.
  SIGGRAPH Asia 2017 Symposium on Education. (CCF-A)

- **A Penetration Depth Computation Method for Articulated Models.**
  Patent Number: ZL201510156024.0.
  Xinyu Zhang, Hao Tian. East China Normal University.

Work & Project Experience

- **VSpera Inc, Shanghai**   May. 2016 – Sep. 2016
  Software Engineering Intern
  — Developed an interactive system for VR English learning software.
  — Encapsulated low-level interfaces of different devices and designed a uniform interface for other modules.

- **Low-cost Open Smart Glass and Augmented Reality Applications**   Jan. 2015 – Dec. 2016
  — Advised by Prof. Xinyu Zhang. Founded by State Key Laboratory of Computer-Aided Design and Computer Graphics, Zhejiang University.
  — Assembled a low-cost smart glass using 3D printing and commercially available devices, like Android development board, monocular display, polarization prism, bone conduction headset, etc.

- **Virtual Shadow Play System based on Motion Sensing Technology**   Jan. 2015 – Jan. 2016
  — Advised by Prof. Changbo Wang. Founded by China Association for Science and Technology
  — Developed a virtual shadow display software based on Intel RealSense and Kinect. Users can use their body to control virtual shadow play characters.

Technical Strengths

- Programming Skills：C/C++, Python
- Software and Tool: OpenGL, Unity3D, PCL, CUDA, OMPL, PyTorch
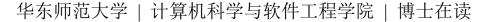
Scholarships & Awards

- 2017, 2018   ECNU & Focus Media Scholarship
- Jun. 2014   Outstanding graduate student of East China Normal University
- Sep. 2013   Third-class school outstanding student scholarships
- Sep. 2012   Second-class school outstanding student scholarships.

Services & Other Experience

- 2017, 2019   Invited speaker of ROS (Robotic Operation System) summer school
- 2015-2017   Volunteer for ROS (Robotic Operation System) summer school
- Oct. 2016   Participated in Shanghai International Marathon and completed the full marathon.
- Nov. 2016   Participated in Thousand Island Lake Marathon and completed the full marathon
- Sep. 2015   Volunteer for National Popular Science Day

田 浩

华东师范大学 | 计算机科学与软件工程学院 | 博士在读

个人信息

联系电话：+86-13795494199　　　　　　邮箱地址：nicktian.ecnu@gmail.com

毕业时间：2020 年 3 月　　　　　　　　个人主页(英文): https://hao-tian-ecnu.github.io/

研究方向：计算机图形学，自然人机交互与仿真，AR/VR，机器人

地址：上海市普陀区中山北路 3663 号华东师范大学理科大楼 B231

教育经历

- **华东师范大学**　　　　　　　　　　　　　　　　　　2014.09 – 至 今
  计算机科学与软件工程学院 | 本科直博
  导师：王长波教授，张新宇副教授

- **美国马里兰大学帕克分校**　　　　　　　　　　　　2018.03 – 2019.03
  计算机科学系 | 国家留学基金委公派联合培养博士生
  导师：Dinesh Manocha 教授

- **华东师范大学**　　　　　　　　　　　　　　　　　　2010.09 – 2014.06
  软件工程学院 | 学士

学术成果

- **Transferring Grasp Configurations using Active Learning and Local Replanning [C]**.
  Hao Tian, Changbo Wang, Dinesh Manocha, Xinyu Zhang.
  2019 IEEE International Conference on Robotics and Automation (ICRA). (CCF-B)

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  SIGGRAPH Asia 2017 Symposium on Education. (CCF-A)

- **一种多关节模型穿透深度的计算方法. ZL201510156024.0.专利，已授权.**
  张新宇，田浩. 华东师范大学

实习&项目经历

- **围光智能科技(上海)有限公司**   2016.05 – 2016.09
  软件工程实习生
  主要工作：在实习期间负责 VR+英语学习平台的交互模块开发，探索并开发 VR 学习环境中最有效的交互过程，如基于仿真手的交互；将交互技术适配多种主流 VR 设备，包括 HTC Vive 和 Oculus Rift 等；将底层设备和相关接口进行封装，提供统一的数据获取接口给其他业务模块。

- **低成本智能眼镜 OpenGlass 与增强现实应用**   2015.01 – 2016.12
  指导教师：张新宇副教授 | 浙江大学 CAD/CG 国家重点实验室开放课题
  主要工作：作为项目主要负责人，承担硬件与软件开发任务；利用 3D 打印和市场上可买到的零部件设备，如安卓开发板、单目显示器、偏振立方棱镜、骨传导耳机等，制作了一副低成本的智能眼镜；在低成本 AR 眼镜上开发轻量级的 AR 应用，如天气预报。

- **基于体感交互技术的皮影戏虚拟展示与科普宣传**   2015.01 – 2016.01
  指导教师：王长波教授 | 中国科协科普部研究生科普能力提升项目
  主要工作：作为项目负责人，研究基于人体动作的交互技术，开发基于 Kinect 的体感皮影交互系统。该项目利用 Kinect 设备捕捉人体骨骼数据，与二维的数字皮影模型绑定，实现通过身体来实时控制虚拟皮影人物功能。

专业技能

- 编程技能：C/C++, OpenGL, Unity3D, PCL, CUDA, OMPL, Python, Pytorch
- 英语能力：CET-6

奖学金&获奖

- 2017，2018 年 华东师范大学分众奖学金
- 2014 年 11 月 "创青春"全国大学生创业大赛公益创业赛铜奖
- 2014 年 6 月 华东师范大学优秀毕业生
- 2012，2013 年 分别获得华东师范大学优秀学生二、三等奖学金

社会服务&其他经历

- 2017，2019 年 机器人操作系统(ROS)暑期学校特邀演讲嘉宾
- 2015 – 2017 年 三届机器人操作系统(ROS)暑期学校志愿者
- 2016 年 10 月 上海国际全程马拉松完赛；11 月千岛湖全程马拉松完赛
- 2015 年 9 月 上海市"全国科普日"活动志愿者