Biao Jia

Curriculum Vitae

Education

Aug.2016- University of North Carolina at Chapel Hill, ph.D candidate, Computer Science Department,

Present advised by Dinesh Manocha.

Sept.2010- Tsinghua University, Beijing, B.Eng, Computer Science and Technology.

July.2014

Relevant Skills

Language C++, Python, Matlab, Bash, Java

Framework ROS, OpenCV, OpenAI, Flask, tessaract, NLTK

Employment History

Jan.2017 University of North Carolina at Chapel Hill, Teaching Assitant.

Comp 410.1 Data Structure

July.2014- Landscape Mobile Tech Co., Ltd., Beijing, Algorithm Engineer.

May.2015 Designed algorithm for two iOS apps: Sight and Screenshots.

- Built an iOS application dataset and a application classifier with interns.
- Enhanced the OCR rate on screenshots of tesseract by rebuilding models and rewriting functions.
- Designed an algorithm to grab the icons and pictures on the screenshots.

Research Experience

Aug. 2016 Resolution-Complete Multi-agent Motion Planning with Arbitrarily-Shaped Obstacles, submitted to AAAI 2017, coauthor with Liang He, Dinesh Manocha.

We highlight its performance on challenging 2D benchmarks and highlight the benefits over prior methods.

Spring.2014 Pedestrian Segmentation after Detection, Diploma Project, advised by Ai Haizhou.

Apply superpixel segmentation, probabilistic model and sparse codinng to compute the segmentation confidence map. Highlight in computing efficiency.

Summer.2013 **Context based Binary Image Retrieval based on Visual Vocabulary**, *Hong Kong Polytechnic University*, submitted to ICPR 2014.

Application of this algorithm is to patent image retrieval.

Courses

Graduate University of North Carolina at Chapel Hill.

- Motion Planning
- o 3D Computer Vision
- Advanced Machine Learning
- Natural Language Processing

Awards

Sep. 2011 Scholarship in Tsinghua University, 3rd Place.

Nov. 2008 National Olympiad in Informatics in Provinces, 1st Prize.

Nov. 2007 National Olympiad in Informatics in Provinces, 1st Prize.