

# Hongyang (Henry) Yu

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## EDUCATION

- **Rutgers University**, New Brunswick, NJ Master of Science in Computer Science  
GPA: 3.67/4 Anticipated Graduation: 05/2017
- **Shandong University**, Jinan, China Bachelor of Engineering in Computer Science and Technology  
GPA: 3.5/4 Graduation: 06/2015

## COMPUTER SKILLS AND COMPETENCIES

- **Programming Languages:**
  - **Proficiency:** Java, Python, Matlab, SQL
  - **Familiarity:** C++, C, Swift, Objective-C, PHP, HTML, XML, JS, JSON, MongoDB, Git
- **Application Software and Platforms:** Linux, MySQL, MongoDB, Apache, ROS, OpenCV, Point-Cloud

## EXPERIENCE

- **Publication:** A New Finger-Knuckle-Print ROI Extraction Method Based on Two-Stage Center Point Detection. Yu, Hongyang, Yang, G., Wang, Z. and Zhang, L. (EI included) 03/2015
- **Machine Learning and Data Mining Lab**, Shandong University - Research Assistant 03/2014 – 01/2015
  - Research topic: Finger-knuckle-print Pattern Recognition
- **Inno Student Lab**, Shandong University 10/2011 – 06/2015
  - Leadership: I was the team leader from May 2013 to May 2014
- **Software Engineering Institute**, Peking University - Research Assistant Intern 07/2013
  - Research topic: Software Problem Detection
  - Report: Problem Detection by Mining Patterns of Console Logs

## PROJECTS

- **Song Recommendation System** 2015
  - Technology: Java, MySQL, Latent Factor Model, Matrix Factorization
  - Responsibility: algorithm design and music player implement in a 3-member team
- **Products Searching** 2016
  - Task: predicting the relevance of search results on homedepot.com
  - Technology: Python, SVR, TF-IDF, TLS, CDR, Okapi, JSON, MongoDB
  - Responsibility: text feature extraction and SVR implement in a 3-member team
- **Projects Instant Search** 2016
  - Task: searching project information from code library
  - Technology: MongoDB, JS, Meteor, JSON, Linux
- **Robotics Grasping** 2016
  - Task: predicting score of robotic grasping
  - Technology: Python, Point Cloud Library, Keras, Scikit-learn, CNN, SVR
- **Cluttered Objects Classification, Detection and Recognition** 2016
  - Task: predicting labels given bounding boxes of images
  - Technology: Python, Keras, CNN
- **iOS App TravelWorld** 2016
  - Task: introducing famous landscapes in the world to guide visitors
  - Technology: Swift, Xcode, MySQL
- **Other projects:**
  - **2015 – current:** 1. Optical character recognition (Java); 2. Face detection (Java); 3. Robotics pathfinding through unknown territory (Java); 4. Camera calibration and augmented reality (Matlab); 5. Image inpainting (Matlab); 6. Threads package implement (Linux, C); 7. Basic file system implement (Linux, C)
  - **2011 – 2015:** 1. MP3 player (Java); 2. Reversi game (Java); 3. Real estate marketing database system (PHP); 4. Fatigue detection (C++); 5. Robotic fish water polo game (C++); 6. Massive small files transfer (C++)