LI, Zhihao

http://codinfox.github.io

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EDUCATION

Tongji University   **Shanghai, China**
B.Eng. in *Software Engineering*   *Sept.2011 - Jun.2015 (Expected)*
- GPA: **4.95/5.0** Ranking: **1/149**
- Related Courses: *Object-Oriented Programming, Data Structures, Operating System, Compiler Principle, Computer Architecture, Computer Network, Data Mining & Analysis, Machine Learning*

Rose-Hulman Institute of Technology   **Terre Haute, IN**
Visit Student in *Computer Science & Software Engineering*   *Aug.2014 - Nov.2014*
- GPA: **4.0/4.0**
- Related Courses: *Design & Analysis of Algorithms, Artificial Intelligence*

RESEARCH EXPERIENCES

Interest: Computer Vision, Machine Learning, Artificial Intelligence

Biologically Inspired Vision-based Indoor Localization   **Terre Haute, IN**
Directed by Prof. David Mutchler, Rose-Hulman Institute of Technology   *Sept.2014 - Present*
- Make use of biologically plausible method of Visual Saliency and Gist
- Make use of SIFT feature and descriptor, BoF model, and SVM
- Symposium: 11th Interdisciplinary Research Collaborative of RHIT
  Oral Presentation: *Biologically Inspired Vision-based Indoor Robot Localization and Scene Classification*

iLab@Tongji, Undergraduate Research   **Shanghai, China**
Directed by Prof. Laurent Itti, Tongji University and University of Southern California   *Jan.2014 - Present*
- Research on indoor service robot localization and navigation and applications of Saliency and Gist
- Independently implemented biologically plausible algorithm of Gist of a scene
- Independently implemented color manipulation algorithms including Retinex

Multimedia & Intelligent Computing Lab, Undergraduate Research   **Shanghai, China**
Directed by Prof. Hanli Wang, Tongji University   *Sept.2013 - Dec.2013*
- Research on computational aesthetics based image retrieval engine
- Tried to use of intensity, color, texture and shape features to assess whether a picture is beautiful
- Developer of the iOS client of a image search application

MOOC: Machine Learning *Coursera Certificate*   *Jun.2014*

TEACHING EXPERIENCES

Teaching Assistant   **Shanghai, China**
School of Software Engineering, Tongji University   *Spring, 2013*
- Teach exercise and review sessions of the first year Digital Logic course
- Outstanding Teaching Assistant Award

PROJECT EXPERIENCES

NRT (Neuromorphic Robotic Toolkit)   **Shanghai, China**
Cooperating with USC iLab   *Aug.2014 - Present*
Contributor
- Develop several color manipulation and image processing algorithms, including Retinex and Gist

GF - An Memory-aid Application for learning English Words **Shanghai, China**
Cooperating with New Oriental Education & Technology Group(NYSE:EDU) *Aug.2013 - Feb.2014*
Project Manager
  - Developed an iOS application with proper algorithm to help people better memorizing English words

Using Networks to Measure Influence and Impact **Shanghai, China**
Interdisciplinary Contest in Modeling *Feb.2014*
  - Used Matlab, SPSS, Excel and Gephi to do co-authorship network and do data visualization
  - Proposed an Entropy-Weight-Based Gray Relational Analysis model, a quantitative method for analyzing the correlation between two subjects and avoid human interference in the weighting process.

Cellular Automaton Simulation Based Analysis Model on City Lane Occupation **Shanghai, China**
China Undergraduate Mathematical Contest in Modeling *Nov.2013*
  - Used Matlab to implement cellular automaton model and simulate the city traffic

Navigation Instrument for Smartphones Based on Real-time Traffic Condition **Shanghai, China**
Funded by Shanghai Innovation Experiment Program *Nov.2011 - Nov.2013*
Team Leader
  - Developed an cross-platform web-based HTML5 app to gather and share real-time traffic conditions across Shanghai automatically and provide the users with the best driving route

SmartEXPO - An Online Exhibition System **Shanghai, China**
Funded by SITP (Student Innovation Training Program), Tongji University *Mar.2013 - Jun.2013*
Web Front-end Engineer
  - Developed a web-based virtual online exhibition system to aid the real-world exhibitions using HTML5

CloudEDU - An Online Education System **Shanghai, China**
Project for Microsoft ImagineCup 2014 and Course Project *Aug.2013 & Mar.2014*
Database Administrator
  - Developed a C/S application to enable people to share their knowledge with SQL Server and C#

HONOURS & AWARDS

14'   **Google Excellence Scholarship**, Google (Top 62 nation-wide, including graduate students)
       Meritorious Winner of Interdisciplinary Contest in Modeling 2014 (Globally Top 10%)
           Paper: *Using Networks to Measure Influence and Impact*
       First Prize for Microsoft ImagineCup 2014 Tongji U, Microsoft
13'   **National Scholarship**, Ministry of Education of the People's Republic of China (Top 0.2%)
           I was the only one in my school who won the scholarship for two consecutive academic years.
       First-class Scholarship, Tongji University (Top 10%)
       Second Prize for China Undergraduate Mathematical Contest in Modeling, Shanghai (Top 10%)
           Paper: *Cellular Automaton Simulation Based Analysis Model on City Lane Occupation*
       Outstanding Student Award, Tongji University (Top 10%)
12'   **National Scholarship**, Ministry of Education of the People's Republic of China (Top 0.2%)
       First-class Scholarship, Tongji University (Top 10%)
       Outstanding Student Award, Tongji University (Top 10%)
       Outstanding League Member Award, Tongji University (Top 5%)
       Bronze Prize for Master the Mainframe Contest, IBM

TECHNICAL STRENGTH

Programming Languages	C/C++, Matlab, Python, Java, JavaScript, HTML, CSS, LaTeX, Objective-C
Platforms	Linux, Web, OS X (Unix), iOS
Tools	Git, SVN, Vim, GDB