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 Digital Logic course for first year students
- 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 analyze 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 with SQL Server, C#, and WCF to enable people to share their knowledge

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