LI, Zhihao

http://codinfox.github.io

Room#201, Section#2, Building#10, 9 Siliuzhongzhi Road
Qingdao, Shandong, China 266000
+86 188-1759-8848 | Zhihao0988@gmail.com

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: *Data Mining & Analysis, Machine Learning, Object-Oriented Programming, Data Structures, Operating System, Compiler Principle, Computer Architecture, Computer Network*

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: *Artificial Intelligence, Design & Analysis of Algorithms*

RESEARCH EXPERIENCES

Interest: Computer Vision, Machine Learning, Artificial Intelligence

Undergraduate Independent Research, RHIT **Terre Haute, IN**
Directed by Prof. David Mutchler, Rose-Hulman Institute of Technology *Sept.2014 - Present*

- Using biologically plausible method of Visual Saliency and Gist to recognize indoor scenes
- Using SURF feature, BoF model, and Histogram method to uniquely describe and identify scenes
- Symposium: The 11th Annual IRC Undergraduate Student Research Symposium, RHIT
  Oral Presentation: *Biologically Inspired Vision-based Indoor Robot Localization and Scene Classification*

iLab@Tongji **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

Key Laboratory of Embedded System & Service Computing, Ministry of Education **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 and analyze 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 (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