

# YIHAO FENG

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## EDUCATION

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**Beihang University (BUAA)**, Beijing, China

Aug.2012 –Jul.2016 (Expected)

*B.E. in Software Engineering*

Rank: 4 / 134 Overall GPA:3.74 / 4 (Major GPA:3.85 / 4)

## PROGRAMMING SKILLS

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- Programming Languages: C/C++, Java, C#, PHP, Python, JavaScript,
- Programming Framework : Node.js, Django, Android, WPF
- Scientific Software & System: Matlab, Mathematics, Weka, Hadoop, openSMILE, Torch, LightSide
- Database: MySQL, Microsoft SQL Server, MongoDB

## EXPERIENCE & RESEARCH

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**ArticuLab**, Carnegie Mellon University, USA

Jul.2015 – Sept.2015

*Summer Research Intern* Adviser: Prof.Justine Cassell & Dr.Alexandros Papangelis

**Research Topic:** Modelling rapport in human or human-virtual peer conversation in a multimodal way

- Extracted visual and acoustic features by using openSMILE and CLM-Framework and synthesized them.
- Dealt with cleaning data, feature selection, imbalanced data problems and ran baseline with Weka.
- Applied linear-CRF to model rapport in a temporal way and achieved a result of 74% accuracy.
- Tried to capture inner correlation of rapport by using HCRF and achieved a result of 70% accuracy.

**State Key Laboratory of Machine Perception**, Peking University, China

Oct.2014 – Present

*Undergraduate Research Assistant* Adviser: Prof.Guojie Song

**Research Topic:** Inferring social relations among users in mobile social network

- Proposed a method to extract geographical context meaning from LBS service based on **TF-IDF**.
- Ameliorated imbalanced problem by applying a distribution-sensitive learning parameter in graphs.
- Built a Triadic factor in the model by adopting the Structural Balance Theory in our mobile social network.
- Built a model called BTFG(Balanced Triadic Factor Graph) based on factor graph and bellowing discovery.

**Mathematical Modeling & Algorithms Laboratory**, University of Tsukuba, Japan

Jul.2014

*Academic Visitor* Adviser: Dr.Yasuyuki Maeda

**Research Topic:** Basic research realization in Image Recognition

- Learned Basic Machine Learning method(SVM, PCA) to solve Image Recognition problem.
- Applied the PCA,SVD method to Recognize simple handwriting numbers by using Matlab.

**Mobile & Big Data Department**, Zhiquan.Inc, China

Feb.2015-Jun.2015

*Software Engineer* Adviser: Dr.Yun Lu

**Project:**Zhiquan Android App Platform

- Built the IM chat and social relation part of the Android App.
- Implemented the initial version of User Recommendation System based on **User-Based** algorithms.

## SELECTED CURRICULUM DESIGN

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**Project:** *Online Hospital Booking System*

Oct.2014-Jan.2015

*Project Manager & Back-end Developer* Adviser: Dr.Huobin Tan

- Designed the system architecture and set up the system development & operating environment.
- Designed and built the collections of nosql Database MongoDB.

- Realized and tested the back-end of the system using NodeJS.

**Project:** *Android Smartphone Assistant*

Mar.2014-Jun.2014

*Android Developer* Adviser: Prof.Yunxiang Lu

- Analyzed project requirements with software engineering methodologies.
- Designed algorithms of trash cleaning and implemented the method of app locker.
- Developed the Android app with another student.

**Project:** *Android App of Car Pooling*

Mar.2014-Jun.2014

*Android & Back-end Developer* Adviser: Sir.Jun Lin

- Designed the system with Agile methodology.
- Designed algorithms of how to find the suitable car for users.
- implemented the server of the system using LAMP.

## HONORS AND AWARDS

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|---|---------------------|
| • National Scholarship For Excellent Academic Performance (Top <b>2%</b> )                      | Sept.2013           |
| • National Endeavor Scholarship (Top <b>5%</b> )  | Sept.2014           |
| • Excellent Student, Beihang University(Top <b>5%</b> , continued 2 years)                      | Sept.2012-Sept.2014 |
| • <i>2<sup>nd</sup> Prize</i> , Mathematics Competitions of Beihang University                  | Jun.2013            |
| • <i>1<sup>st</sup> Prize of Beijing</i> , China Undergraduate Mathematical Contest in Modeling | Sept.2014           |
| • <i>Meritorious winner</i> , Mathematical Contest in Modeling (Top <b>13%</b> )                | Apr.2015            |

## MISCELLANEOUS

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- **Area of Interests:** Probabilistic Graphical Models, Social Network, Multimodal, Data Mining
- **English:** CET-4: 609 / 720    CET-6: 584 / 720    TOFEL: 96 / 120
- **Persoonal Website:** <http://lewiskit.github.io>
- **Github:** <https://github.com/lewisKit>
- **LinkedIn:** <https://cn.linkedin.com/in/yihao-feng-15937488>