

# Yuxi Zhang

## Computer Science

### RESEARCH EXPERIENCE

#### Discovering Human Mobility Patterns With Topic Probability Model

JUN 2014 – SEP 2014

*Big Data and Business Innovation Lab*

*Shanghai Jiao Tong University*

This project aimed to classify different types of users and extract the patterns of their driving behaviors as well as the hidden region functions and temporal patterns.

We proposed a model named Temporal-Spatial Latent Dirichlet Allocation (TS-LDA), an extended probabilistic topic model based on Latent Dirichlet Allocation (LDA), to analyze driving patterns.

#### Sonification of Electroencephalograph in Brain-Computer Interface

NOV 2013 – MAY 2014

*Brain-like Computing and Machine Intelligence Lab*

*Shanghai Jiao Tong University*

This project aimed to display the emotion statements hidden behind the brain signals in a sonification way, a data representation method through sound to convey information.

We proposed a hybrid sonification method which combines the frequency features of brain signals and the emotion labels classified by Supporting Vector Machine (SVM).

### PUBLICATIONS

**Zhang Yuxi**, Hu Jiawei, Zhang Ya. Mobility Pattern Discovery from Automobile Traces with A Temporal Spatial Model, submitted to the Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI-15).

**Zhang Yuxi**, Huang Yifeng, Yue Junwei, Zhang Liqing. Sonification for EEG Frequency Spectrum and EEG-Based Emotion Features[C]//Neural Information Processing. Springer International Publishing, 2014: 42-49.

### INTERNSHIP EXPERIENCE

#### Live Media Broadcasting over Azure

SEP 2014 – PRESENT

*Microsoft IT, Shanghai*

This project aims to build a live media broadcasting platform over cloud (Microsoft Azure). The broadcaster can use a camera to upload live video stream to cloud through an encoder. The platform is logged in through ADFS authentication and provides live video seminar and topic discussion based on Yammer.



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### EDUCATION

SEP 2011 – JUN 2015

#### B.S. in Computer Science, IEEE Honor Class

Shanghai Jiao Tong University, China

- GPA: Major: 87.3/100, Overall: 87.2/100

JUL 2013 – AUG 2013

#### Summer Session in U.C, Berkeley, U.S.A.

- Course: The Nature of Mind, Introduction to How the Brain Works.

### SCHOLARSHIP

2013 Xindong Scholarship (Third-Class),  
XinDong Co. Ltd. (TOP 8%)

2013 Academic Excellence Scholarship  
(Second-Class), Shanghai Jiao Tong  
University (TOP 10%)

### CONTESTS AND HONORS

FEB 2014 The Mathematical Contest in Modeling (MCM), **Meritorious Award**

NOV 2012 The Fourth Pro-Face Cup Human-Computer Interface Coding Contest, **The 1st Prize**

MAY 2012 Microsoft Research Asia (MSRA) *Beauty of Programming* Contest, National Final (64 out of 3850)

MAY 2012 Merit Student in Shanghai Jiao Tong University

Nov 2010 National Olympiad in Informatics in Provinces (NOIP), **The 1st Prize**

### TEACHING-ASSISTANT EXPERIENCE

SPRING 2013 Programming & Data Structure

SUMMER 2012 Programming Practice

SPRING 2012 Programming & Data Structure

### COMPUTER SKILLS

PROGRAMMING C/C++/C#, Java, Python, MATLAB, PASCAL, HTML, Javascript, SQL, LABVIEW

OPERATING SYSTEM Windows, Linux

DOCUMENTATION  $\LaTeX$