Yali Bian

Tel: 540-998-0256 ⋄ Email: yali@vt.com
www.yalibian.com ⋄ github://yalibian
3160 Torgersen Hall, Virginia Tech
Blacksburg, Virginia, 24060, United States

OBJECTIVE

To pursue a **summer Internship** position in the area of **visual analytics** and **web development**

EDUCATION

Virginia Tech **Aug. 2016 - Present**
Ph.D. in Computer Science Application
Advisor: Dr. Chris North

Zhejiang University **Sep. 2013 - Apr. 2016**
M.S. in Computer Science and Technology
Advisor: Dr. Jiangqin Wu
Overall GPA: 3.78/4.0

Harbin Institute of Technology **Sep. 2009 - Jun. 2013**
B.Eng. in Computer Science and Technology
Advisor: Pro. Che Zhang
Overall GPA: 88.40/100

PUBLICATIONS

Yingzhen Zhu, Xinyi Cao, **Yali Bian**, Jiangqin Wu. **CKGHV: A comprehensive knowledge graph for history visualization.** *Proceedings of the 14th ACM/IEEE-CS Joint Conference on Digital Libraries. IEEE Press, 2014*

Liang Yao, Yin Zhang, Baogang Wei, Wei Wang, Yuejiao Zhang, Xiaolin Ren, **Yali Bian**. **Discovering Treatment Pattern in Traditional Chinese Medicine Clinical Cases by Exploiting Supervised Topic Model and Domain Knowledge.** *Journal of Biomedical Informatics 58: 260-267 (2015)*

Liang Yao, Yin Zhang, Baogang Wei, Lei Li, Fei Wu, Peng Zhang, **Yali Bian**: **Concept over time: the combination of probabilistic topic model with wikipedia knowledge.** *Expert Systems with Applications, Volume 60, 27-38 (2016)*

Ce Zhang, Gang Cui, **Yali Bian**, Hongwei Liu. **Component-based software reliability process simulation considering imperfect debugging.** *High Technology Letters, 2014, Vol.20, NO.1*

Ce Zhang, Gang Cui, Fanchao Meng, Hongwei Liu, **Yali Bian**. **A software reliability growth model for component based software incorporating debugging delay and imperfect debugging.** *High Technology Letters, 2015, Vol.21, No3*

Ce Zhang, Gang Cui, Hongwei Liu, **Yali Bian**, Qishun Xie. **Unified and Flexible SRGM Framework Incorporating Two Types of Imperfect Debugging.** *Journal of Convergence Information Technology 8, no. 8 (2013).*

Ce Zhang, Gang Cui, Hongwei Liu, Fanchao Meng, **Yali Bian**. **Component-based software reliability analysis incorporating imperfect debugging and change-point.** *High Technology Letters, 2014, Vol.20, NO.4*

TECHNICAL STRENGTHS AND INTERESTS

Visual Analytics	Visualization	JS/D3.js, Processing, Python/Matplotlib
	Text Mining	Python/NLTK, Java/Stanford NLP
	Web Development	JS/React, Node/Express/Koa

RESEARCH EXPERIENCE

Crowdsourcing Visual Analytics on Intelligence Analysis **2016**
InfoVis Lab, Virginia Tech, U.S.

- Working with Dr. Chris North and Dr. Kurt Luther to investigate how crowdsourcing and visual analytics can be combined to support the efforts of an individual analyst engaged in a complex sense-making task.

Data-driven Analysis of Public Policy's Economic and Social Impact **2015**
Data Science Institute, Imperial College London, U.K.

- Worked with Dr. Chao Wu to display the complex interplay between a country's infrastructure installations as well as characteristics and behaviors of its population
- Co-developed the data-driven visual analytics of China's "One Belt, One Road" Initiative, focusing on its economic and social impact (presented to Chinese President Xi Jinping during H.E's visit to the Imperial College)

China Knowledge Center for Engineering Science and Technology **2014**
Key Project of the Chinese Academy of Engineering, P. R. China *Graduate Research Assistant*

- Developed a knowledge-based papers interactive visual analytics: a system to mine topics from large collection of papers and visualize topics and their changes over time
- Designed and developed a life experience visualization system: combining a geographic map with timelines to indicate personal experience (employment, locations, personal events, etc.)
- Developed a cause-effect relation visual analytics: a bundle layout style view with interactive visualization components.
- Co-developed a visualization-creation toolkit to help web developers create and use common types of data visualization

China Academic Digital Associative Library **2013**
211 Key Project of the Ministry of Education, P. R. China *Graduate Research Assistant*

- Co-developed the Chronicle of Chinese Literature website, responsible for the development of the timeline of literature in Chinese history
- Co-developed the Calligraphy Website, responsible for the reformatting fonts with new calligraphy designs

Research on Software Reliability **2009-2012**
Undergraduate Academic Research

- Worked with Prof. Ce Zhang to research on Software Reliability, responsible for the assessment of software reliability assessment models

PROJECTS

VIA - github - demo - github.com/yalibian/via
VIA (Visualization for Intelligence Analysis) is a intelligence analysis application which supports expert analysts in complex sense-making, focusing on the task of finding connections between entities large collection of documents.

Vis-Topics - github - demo - github.com/yalibian/vis-topics
Vis-Topics is knowledge-based interactive visual analytics system for papers: a system to mine topics from a large collection of papers and visualize topics and their changes over time.

Vis-LifeStory - github - demo - github.com/yalibian/vis-lifestory
Vis-LifeStory is applied to display the life story of someone visually, which includes: employment, locations, personal events, etc.

Vis-Karma - github - demo - github.com/yalibian/vis-karma
A cause-effect relation visual analytics: a bundle layout style view. With lots of interactive visualization components, users can display, insert, edit and delete relations between causes and effects.

Vis-ThreeKingdoms - github - demo - github.com/yalibian/vis-threekingdoms
A historical events visualization for users to learn history: the example of the Three Kingdoms in Chinese history shows how it visualizes the history of people, places, and events.