

Yali Bian | Résumé

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Objective

To obtain a software/web development or data analytics position.

Education Background

- **M.S. in Computer Science, Virginia Tech, Blacksburg, VA** (GPA: 4.00/4.00) Aug. 2016 – Dec. 2018
- **M.S. in Computer Science, Zhejiang University, China** (GPA: 3.78/4.00) Sep. 2013 – Mar. 2016
- **B.Eng. in Computer Science, Harbin Institute of Technology, China** (GPA: 88.40/100) Sep. 2009 – Jun. 2013

Work Experience

- **NOKIA Bell Labs** Jun. 2017 – Aug. 2017
Summer Intern, NJ | Data Science Research
 - Developed an interactive machine learning model for detecting anomalies from millions of time-series Telecom data.
 - Design a time-series visualization application for the big dataset to render and explore huge amount of time points in real-time.
 - Technologies used: Python Flask/Scikit-Learn, D3.JS, React.JS, Interactive Machine Learning, Active Learning
- **Chinese Knowledge Centre for Engineering Science and Technology (CKCEST)** Dec. 2014 – Dec. 2016
Student Software Engineer | M.S. Student at Zhejiang University, China
 - Developed a knowledge-based visual text analytics system for documents topics and evolution extraction.
 - Designed and developed a life story visualization website: combining a geographic map with timelines to indicate personal experience (employment, locations, personal events, etc.)
 - Technologies used: Python, Socket.IO, Racket, JavaScript, HTML5, D3.JS, Topic Modeling, Python NLTK, Stanford NLP.
- **China Academic Digital Associative Library (CADAL)** Jul. 2013 – Dec. 2014
Student Software Engineer | M.S. Student at Zhejiang University, China
 - Co-developed the website "Database & statistical diagram of Chinese Chronicle": 140 million words information about all the Chinese writers and their articles, relationships and locations from 1046 BC to 2000 DC.
 - Developed the Calligraphy Website, responsible for the reformatting and rendering of fonts with new calligraphy designs.
 - Technologies used: Java, MySQL, JavaScript/HTML/CSS, D3.JS.

Research Experience

- **Visual Analytics on Deep Neural Network** Aug. 2017 – Present
Research Assistant | Ph.D. Student at Virginia Tech
 - Design a method that mapping visual interacts into embedded vectors through deep learning techniques
 - Implement an image & document recommendation system based on users interactions with transfer learning through CNN, RNN, and Word2Vec.
 - Technologies used: PyTorch, Scikit-Learn, NTLK, Gensim, D3.JS, React.JS, Webpack.JS, Crowd-Sourcing, MTurk.
- **Visual Analytics on Knowledge based Text Mining** Jul. 2013 – Mar. 2015
Research Assistant | M.S. Student at Zhejiang University
 - Worked on the combination of visual analytics and topic mining methods (topic modeling, LDA)
 - Published three papers on how visualization and text analytics techniques could help explore a large collection of documents:
 - CKGHV: A comprehensive knowledge graph for history visualization. *Joint Conference on Digital Libraries*
 - Discovering Treatment Pattern in Traditional Chinese Medicine Clinical Cases by Exploiting Supervised Topic Model and Domain Knowledge. *Journal of Biomedical Informatics*
 - Concept over time: the combination of probabilistic topic model with wikipedia knowledge. *Expert Systems with Applications*
 - Technologies used: NLTK, Topic Modeling, LDA, D3.JS, JavaScript, Python

Skills

- **Programming Languages:** JavaScript/Node.JS, Python, Java, C/C++, Processing
- **Data Analytical Toolkits:** PyTorch, Scikit-Learn, NLTK; Pandas, Matplotlib, SciPy, NumPy
- **Web Development:** Spring, Flask, Express.JS, Koa.JS; React.JS, D3.JS, HTML5/CSS; MySQL, MongoDB
- **Virtual Environment:** CAVE, ParaView, FreeVR, Unity3D, Instant-Player, X3D
- **Other:** Bash, GCC, Make, Vim, Unix/Linux, Lisp/Scheme, AWS, Apache/Tomcat/XAMPP, Git, L^AT_EX