Yali Bian | Résumé

+1-540-998-0256 • yali@vt.edu • www.yalibian.com
Computer Science, Virginia Tech

Education Background

- **M.S. in Computer Science, Virginia Tech, Blacksburg, VA** (GPA: 3.97/4.00) Aug. 2016 – May. 2019
- **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

- **Facebook** Jun. 2018 – Aug. 2018
  Engineering Intern | Machine Learning Team
  - Training sparse neural networks models to recommend alumni groups from billions of groups for 2.23 billion Facebook users based on their profiles and history interactions.
  - Extracting billions of users and relevant alumni group tuples through collaborative filtering, label propagation, and rule-based filtering.
  - Performing an A/B testing through creating webpages to recommend groups to Facebook users through React.JS and PHP.
  - Technologies used: Hive/Spark/Presto, DataSwarm/Digraph, FBLearner/Sparse Neural Network/Gradient Boosting Decision Tree.
- **Bell Labs** Jun. 2017 – Aug. 2017
  Research Intern | Data Science Research
  - Developed an interactive machine learning model for detecting anomalies from millions of time-series Telecom data.
  - Created an Java platform to perform data preprocessing and feature engineering on millions of time-series dataset online.
  - Developed an real-time display website for the big time-series dataset to render and explore huge amount of time points, through React.JS, D3.JS.
  - Technologies used: Python Flask/Scikit-Learn, D3.JS, React.JS, Interactive Machine Learning, Active Learning
- **Chinese Academy of Engineering** 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 mining through Java Standford NLP.
  - Implement a life story gallery website for millions of history people: combining a geographic map with timelines to indicate personal experience through Tomcat, React.JS and MySQL.
  - Technologies used: Java/Lucene/Spring, MySQL, Socket.IO, JS/React.JS, Apache/Tomcat, NLTK.

Research Experience

- **Deep Learning for Visual Analytics** Aug. 2016 – Now
  Research Assistant | M.S. 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.
  - Technologies used: NLTK, Topic Modeling, LDA, D3.JS, JavaScript, Python

Skills

- **Programming Languages:** Java, JavaScript/Node.JS, Python, C/C++, Go
- **Data Analytical Toolkits:** PyTorch, Caffe2, Scikit-Learn, NLTK; Pandas, Matplotlib, SciPy, NumPy
- **Web Development:** Java/Spring, Python/Flask, Node/Express.JS/Koa.JS; React.JS, D3.JS; MySQL, MongoDB
- **Big Data:** Hadoop, Hive, Presto, Spark, DataSwarm, Apache Giraph, Apache Lucene/Solr
- **Other:** Bash, GCC, Make, Vim, Unix/Linux, Lisp/Scheme, AWS, Apache/Tomcat/XAMPP, Git, Mercurial (hg), LaTeX