Bo-Sin **Zhang**

SENIOR SOFTWARE ENGINEER · DATA ENGINEER

✉ lonsilent@gmail.com | ⬡ LonSilent | ▦ bo-sin-zhang | k lonsilenty

Summary

Senior Software Engineer at FST Network. 5+ years experience in backend development, web programming, data engineering, and natural language processing. Love Linux-based environment and enjoy to solve interdisciplinary problems.

Work Experience

FST Network   *Taipei, Taiwan*

SENIOR SOFTWARE ENGINEER   *Oct. 2018 - Now*

- Implement and design Node.js CLI (commander.js) with FST product LOC.
- Help business customers analyze problems and provide technical support by using LOC.
- Implement POC of Event Sourcing pattern with Elasticsearch (time series data).
- Design and implement search mechanism for time series data. Including search by query and pattern matching search with Elasticsearch (EQL, Search API).
- Develop backend API of blockchain platform integrated with k8s.
- Design Authentication & Authorization mechanism with cloud native solutions (Open Policy Agent, Envoy sidecar pattern).
- Implement explorer of Ethereum private chain with React
- Use GraphQL with Relay

Appier   *Taipei, Taiwan*

SOFTWARE ENGINEER INTERN   *Aug. 2016 - Feb 2018*

- Develop in Chinese & Japanese NLP tools for text preprocessing.
- Implement an E-commerce Recommendation System with Factorization model.
- Implement a Network Representation Learning system for recommendation.

National Chengchi University   *Taipei, Taiwan*

TEACHING ASSISTANT   *Sep. 2016 - Jun. 2018*

- Sep. 2016 - Jan. 2017: Computer Programming (I)
- Feb. 2017 - June. 2017: Social Network Application
- Sep. 2017 - Jan. 2018: Introduction to Digital Contents and Technologies
- Feb. 2018 - Jun. 2018: Web Search and Mining

Education

National Chengchi University   *Taipei, Taiwan*

MASTER DEGREE IN COMPUTER SCIENCE   *Sep. 2016 - Jul. 2018*

National Chengchi University   *Taipei, Taiwan*

BACHELOR DEGREE IN COMPUTER SCIENCE   *Sep. 2012 - Jun. 2016*

Publication

E-commerce Recommendation Systems Based on Heterogeneous Information Network Embedding   *Master Thesis*

AUTHOR   *Aug. 2018*

- NDLTD: `https://hdl.handle.net/11296/95g6xu`
- github: `https://github.com/LonSilent/master_thesis`

ICE: Item Concept Embedding via Textual Information   *ACM SIGIR 2017 short paper*

CO-AUTHOR   *Aug. 2017*

- ACM: `https://dl.acm.org/doi/10.1145/3077136.3080807`
- github: `https://github.com/cnclabs/ICE`

Skill

Programming Language & Tool

- Proficient: Typescript/Javascript, Python
- Familiar with: Rust, C/C++, Java (Spring Boot)
- Tools: Linux terminal, git, vscode, vim, kubectl, latex

Artificial Intelligence

- Natural Language Processing: Chinese & Japanese Segmentation (jieba, mecab), Keyword Extraction
- Information Retrieval: Search Engine Algorithm (ex. TF-IDF, BM25)
- Machine Learning: Text Classification (scikit-learn, xgboost...), Nearest Neighbor Search
- Recommendation: Matrix Factorization, Factorization Machine
- Deep Learning: Network Embedding, Word Representation Learning

Web Development

- Frontend: React, jQuery
- Backend: Express
- Project: ExchangeWorld (`https://github.com/ExchangeWorld/ExchangeWorld`)
- Project: NCCU30 (`https://github.com/SSARCandy/nccu30`)

CLI Development

- Use Node.js (commander.js, inquirer)

Honors & Awards

INTERNATIONAL

2017   **188th place (6%),** Kaggle competition: Quora Question Pairs

2015   **49th place**, 2015 KDD CUP

DOMESTIC

2017   **Excellent Teaching Assistants Awards**, National Chengchi University