Yuxiang Zhu

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EDUCATION

Software Institute, Nanjing University

Master of Engineering in Software Engineering; GPA: 88.4/100

Software Institute, Nanjing University

Bachelor of Engineering in Software Engineering; GPA: 85.6/100

ACADEMIC EXPERIENCE

Research Assistant

Nanjing, China Expected Jun. 2020 Nanjing, China

Sept. 2014 - Jun. 2018

Software Engineering Group, State Key Laboratory for Novel Software Technology, NJU

Nov. 2016 - Present

Nanjing, China

- Issue Classification: Developed a model to classify issues from GitHub and Jira.
 - * Collected and preprocessed over 1.2M issues in GitHub and Jira.
 - * Altered and implemented the k-NN algorithm to detect issues with misclassified input.
 - * Implemented and trained an attention-based bi-LSTM, resulting in **11.1% improvement in F1-score** compared to SVM model, and **5%-8% improvement in F1-score** compared to state-of-the-art approaches.
- **Pull Request Summarization**: Implemented and trained a **seq-to-seq model** to summarize diff files in pull requests into short informative messages. Achieved a BLEU score of 17.3 on a test set of 30k pull requests.
- **Program Comprehension**: Conducted a **systematic literature review** in the field of program summarization, including 41 relevant studies from 2010 to 2019. Compared and discussed techniques used in the state-of-the-art approaches.
- **Stars' Microblog Analyzer**: Designed a cluster algorithm to **group stars who posted similar content** on Weibo (known as Chinese Twitter). Used the **PageRank** Algorithm to identify the central star of each group.
- Requirement Extraction: Developed a tool to automatically collect and analyze user reviews in Google Play.
 - * Collected, filtered, and preprocessed 394k user reviews from 100 popular apps.
 - * Designed and implemented the K-Means++ algorithm to cluster reviews by tf-idf word vector, and then selected words with highest tf-idf weight in each cluster as keywords.
 - * Created a completely automatic tool and developed a Java Web website to display the result.

PUBLICATIONS

- Y. Zhu, M. Pan, Y. Pei and T. Zhang, "A Bug or a Suggestion? An Automatic Way to Label Issues," arXiv:1909.00934 [cs], Sept. 2019. Manuscript submitted for publication.
- Y. Zhu and M. Pan, "Automatic Code Summarization: A Systematic Literature Review," arXiv:1909.04352 [cs], Sept. 2019. Manuscript submitted for publication.

PROFESSIONAL EXPERIENCE

Software Engineer Intern

Shanghai, China Jul. 2017 - Jan. 2018

Meituan-Dianping Inc.

m for internal employees

- **GroupJoy**: As the project manager, **led a team of six newcomers** to develop a platform for internal employees to launch and attend activities, socialize, and find common interests. We spent four weeks on **collecting requirements**, **designing and coding**; currently, our system is **still serving** thousands of employees.
- **CustomerInfoService: Maintained and iterated** a large Java Web System full-stack-ly, which enables more than 40k sales staff to register, manage, and contact merchants all over China.

SCHOLARSHIPS

• First-Class Scholarships for Outstanding Students, Nanjing University (Top 10%)

Nov. 2015

Nov. 2016

• Second-Class Scholarships for Outstanding Students, Nanjing University (Top 20%)

SKILLS

• Languages: Python, Java, SQL, C++, PHP, HTML, CSS Technologies: Maven, Git, Linux, Microsoft Office, Spark, LaTeX

• Development: Object Oriented, Databases, Machine Learning, NLP Standard Tests: TOEFL 107; GRE V160+Q170+AW3.5