

YUNBO NI

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EDUCATION

B.E. in Software Engineering, Nanjing University
 GPA: 4.53/5.00, Rank: 21/257 (8.17%)

Sep, 2021 - Present

PUBLICATIONS

Towards Fixing Panic Bugs for Real-world Rust Programs

Yunbo Ni, Yang Feng, Zixi Liu, Runtao Chen, Baowen Xu.

Apr, 2024

ISSTA'24 Round2 Under Review

Contributions:

- Independently implemented the APR tool, consisting of **5K+ lines of Rust code**.
- Co-designed and conducted a **significant portion** of the experiments.
- Demonstrated practical impact by applying the APR tool to real-world Rust crates, effectively resolving **4 critical panics**. These enhancements addressed arithmetic overflow, error handling, and index out of bounds issues. Noteworthy contributions include improvements reflected in [PR-283](#), [PR-284](#), and [PR-285](#), all of which have been **approved by the maintainer and merged into codebases**.

What Matters Besides Borrow Checking? Toward Understanding Bugs in Rust Compiler

Mar, 2024

Zixi Liu, Yang Feng, **Yunbo Ni**, Shaohua Li, Xizhe Yin, Qingkai Shi, Baowen Xu, Zhendong Su.

OOPSLA'24 Round2 Under Review

Contributions:

- Collected **10K+ data** from the Rust development community using a tool developed by myself, which formed the basis of this empirical study.
- Conducted a manual review and analysis, in collaboration with others, on **2547 Rust bugs**.
- Developed a custom mutator for Rust programs, which was instrumental in uncovering **3 significant bugs** in the official Rust community. These findings have been documented and are accessible via [Issue-117710](#) and [Issue-117844](#), contributing valuable insights to the Rust development community.

PROJECTS

Apache Shardingsphere [\[Contributions\]](#) [\[Interview\]](#)

Jul, 2023

As a contributor to [Apache ShardingSphere](#) - an esteemed Apache top-level project with **over 19K stars**, I played a pivotal role in enhancing the SQLNodeConverterEngine to encompass a broader spectrum of MySQL, PostgreSQL, and OpenGauss SQL statements. Throughout this endeavor, I adeptly tackled **31 exceptional cases** spanning **3 SQL dialects**, resulting in the successful merging of **18 pull requests**.

CompilerBagel [\[Code\]](#)

Aug, 2023

As a participant in the [Huawei BiSheng Cup 2023](#), I was responsible for building a compiler for a subset of the C language from scratch, with a focus on the compiler backend, tailored for **the RISC-V instruction set**. Our team achieved a **high score of 98.8** in the National Competition and was awarded **the National Excellence Award**.

HONORS

National Scholarship, Chinese Ministry of Education, 2022

Nanjing, China

BiSheng Cup National Excellence Award, CERACU, 2023

Guangzhou, China

Huawei Smart Base Scholarship, Huawei, 2024

Nanjing, China

LEADERSHIP

Captain Debate Team of Software Institute, Nanjing University

Sep, 2021 - Sep, 2022

Leader Zheng Gang Future Talent Leadership Camp

Mar, 2022 - Jun, 2022