

YIWEI YANG

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EDUCATION

ShanghaiTech University, Undergraduate 09/2018 – 06/2022

- Major: Computer Science, finished Compiler, Network, Database, OS, Convex, RL, Parallel Computing.

WORK EXPERIENCE

Jump Trading, Shanghai, China 07/2020 – 09/2020

(Linux Team) Production Engineer Intern

- High Frequency Trade Order Book simulation applying Linear Regression Method.
- Applied salt and jinja to automate scheduling of jobs and assigning affinity of cpu cores in Linux DevOps.
- Applied gobidng of gobpf to try IOVisor stuff.

RESEARCH EXPERIENCE

System Lab, ShanghaiTech University 07/2019 – 06/2020

(Undergraduate Research) Intern

- Zhao, Zhe, Guangke Chen, Jingyi Wang, **Yiwei Yang**, Fu Song, and Jun Sun. "Attack as Defense: Characterizing Adversarial Examples using Robustness." .
A2D uses the cost of attacking an input for robustness evaluation and identifies those less robust examples as adversarial since less robust examples are easier to attack.
- Researching MOVE language in Libra currency source code to protect against Arithmetic Overflow, Timestamp Difference.
- Understanding the real access mechanism of Memory Mode Optane Memory and XPBuffer by reverse-engineering methods.

Darko Marinov's Lab, University of Illinois at Urbana-Champaign 07/2021 – 10/2021

(Research Experience for Undergraduate) Remote Program

- Investigating Order dependent Flacky Tests.

PORTFOLIOS

Pint OS (Rust) <https://github.com/victoryang00/PintOS>

A Stanford based Tiny x86 single thread multi process Operating System and WIP rust ABI Implemented Thread, User Program (Argument Passing) Virtual Memory and File System.

Cuckoo Hashing <https://github.com/victoryang00/CuckooHashing>

A Novel Hash method using GPU Implement full two table cuckoo Hash table using CUDA intrinsic.

ChocoPy Compiler <http://s3l.shanghaitech.edu.cn:8081/yangyw/chocopy>

A compiler to LLVM IR and to riscv assembly of python 3.6 subset as ShanghaiTech Compiler class project

SKILLS

- **Programming Languages:** not limited to any specific language, and experienced in Python/Golang, comfortable with Rust/C/C++/Java/Scala/TypeScript (in random order).
- **System:** familiar with operating system concepts and design, have experience in optimizing performance on kernel level using tools like **ebpf** and **strace**.
- **Machine Learning:** familiar with general knowledge of machine & reinforce learning.
- **Developing Tools:** experienced in Linux-based programming, have experience with team tools like Confluence, Jira, Git, etc, DevOps tools like grafana, jenkins, ansible, etc.

MISCELLANEOUS

- Interests: Computer Architecture and System, Software Engineering.
- Awards:
 - Lead GeekPie_HPC *Ranked 2*, SC-SCC21. *Ranked 8*, ISC21.
 - As a member of 0x238e *Best award*, Bitrun, Hang Zhou, 2019.
 - *Second Award*, Shanghai CTF invitation competition, 2019.
- opensource: collective_profiler