

# Arm ETM/PMU

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COMPASS

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## 1 Plan of Last Week

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- ▶ Syscall capturer: handle more and more syscalls...
- ▶ Paper writing: revise & rewrite
- ▶ Make pressure experiments for my syscall capturer

- ▶ Syscall capturer: add support for poll/epoll
  - > Finish *all* (almost) syscalls used in nginx: recvfrom, openat, sendfile, epoll
- ▶ Paper writing: revise & rewrite
  - > rewrite subsection: *Design-Challenge* and design for my syscall capturer
  - > *catch up with Zhenyu's proofreading*
- ▶ Make formal experiments
  - > delayed to today & tomorrow
  - > setting up environment... as we found we should run in SSD
  - > Wenxuan: *why not directly mount and write to SSD*
  - > environment: finished by last night

- ▶ **Scheduling related:** e.g., `wait` and `nanosleep`, we simply ignore
- ▶ **Change State of OS:** e.g., `epoll_create` and `chroot`, ignore again as it will not affect the user's program
- ▶ **Get form OS:** e.g., `getpid`, `getcpu` and `getcwd`, record its return value and memory region change
- ▶ **Input:** e.g., `read` and `recvfrom`, truncate their contents
- ▶ **Output:** ignore again

## 1 Plan for Next Week

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- ▶ Do our best to make zhenyu spend a happy holiday

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## 2 Last Week's plan & This Week's Work & Next Week's plan | 8

Write paper



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### 3 Last week's plan

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- ☒ Writing the non-concurrency evaluation part

Section Name	# of zhenyu's advice	# of fixed
Abstract	-	-
Introduction	92	0
Background	47	13
Design	205	43
Implementation	-	-
Evaluation	-	-
Discussion	-	-
Related Work	-	-

### 3 Background: Revise Progress

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	# of advice	# of fixed	Writer
Concurrency Bug	28	0	Xueying
ETM	13	13	Haonan
Hardware Breakpoints	14	0	YiMing

	# of advice	# of fixed	Writer
<b>Overview</b>	8	6	Haonan
<b>Design Challenges</b>	39	21	Haonan
<b>Online Record</b>			
ETM Manager	9	0	Haonan
Syscall Capturer	18	16	Haonan
<b>Offline Analysis</b>			
Control Flow Builder	24	0	YuXin
Root Cause Detector	101	0	YiMing

### 3 Next week's plan

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Huge workload! Help finish the revise process.