# Computer Architecture I Mid-Term

Chinese Name: _____

Pinyin Name: _____

Student ID: _____

E-Mail ... @shanghaitech.edu.cn: _____

| Question | Points | Score |
|:--------:|:------:|:-----:|
| 1 | 1 | |
| 2 | 3 | |
| 3 | 10 | |
| 4 | 7 | |
| 5 | 6 | |
| 6 | 8 | |
| 7 | 4 | |
| 8 | 2 | |
| 9 | 9 | |
| 10 | 13 | |
| 11 | 21 | |
| 12 | 16 | |
| Total: | 100 | |

- This test contains 14 numbered pages, including the cover page, printed on both sides of the sheet.

- We will use gradescope for grading, so only answers filled in at the obvious places will be used.

- Use the provided blank paper for calculations and then copy your answer here.

- Please turn **off** all cell phones, smartwatches, and other mobile devices. Remove all hats and headphones. Put everything in your backpack. Place your backpacks, laptops and jackets out of reach.

- Unless told otherwise always assume a 32bit machine.

- The total estimated time is 120 minutes.

- You have 120 minutes to complete this exam. The exam is closed book; no computers, phones, or calculators are allowed. You may use two A4 pages (front and back) of handwritten notes in addition to the provided green sheet.

- There may be partial credit for incomplete answers; write as much of the solution as you can. We will deduct points if your solution is far more complicated than necessary. When we provide a blank, please fit your answer within the space provided.

- Do **NOT** start reading the questions/ open the exam until we tell you so!

1. First Task (worth one point): Fill in you name
   Fill in your name and email on the front page and your ShanghaiTech email on top of every page (without @shanghaitech.edu.cn) (so write your email in total 14 times).