CSE 5600 Computer Systems Architecture I

Assignment 4

The goal of this assignment is to pick an interesting topic in computer architecture and to go deeper. New and exciting research is continually being done in the field. We want to learn something new (and exciting) in computer architecture, and to share this with the rest of the class.

This assignment is split into three separate submissions, which will be discussed next.

Part (a) – due Friday, Nov. 13, 2026

Look through the course topics. Is there a topic that perks your interest that you'd like to learn more about? Let's go deeper! Browse or search for a paper published in the last five years (2022-2026) in one of the ISCA, ASPLOS, or HPCA conferences that interests you. (You will be reading the paper and posting an executive summary of it in Piazza in Part (b), but we'll talk about that below.)

For convenience, we provide links to the conference publication websites in each of the conferences below in the Conference Paper Links section. If you are accessing these sites using the WashU network (either because you are on campus or using the VPN), access to these papers is provided free of charge.

Make a Piazza post in the hw4 folder with your paper selection. The post should NOT be anonymous so that we know who to give points to, and should be posted to the Entire Class. (After all, we'd like to learn what our peers are interested in too!)

For full credit, you must give the following information:

1. Which paper did you choose? (Give at minimum the title, year published, conference, and the URL to the paper.)

2. Why did you choose this paper? What perked your interest about it?

Part (b) – due Friday, Nov. 20, 2026

Read the paper and pay attention to what ideas the author(s) are communicating. Write an executive summary of those ideas and what you find interesting about them. The summary should be longer than an abstract, but shorter than the whole paper. We're not so much interested in the length of the summary than the quality of it. We want to learn from each other!

Make a followup Piazza post to the original post you made identifying the paper with your executive summary. If Piazza shows an option to mark it resolved or unresolved (it probably will), go ahead and mark it resolved.

Again, this post should NOT be anonymous, and should be posted to the Entire Class.

For full credit, you must:

1. Post your executive summary for the whole class to see. It must be longer than an abstract but shorter than the whole paper.

2. Be a followup to the original post that identifies the paper.

Part (c) – due Friday, Dec. 11, 2026

There will be a peer review component. Read at least 3 posts from your peers and respond to them as followup discussions in Piazza. Again, this should NOT be anonymous.

Conference Paper Links

1. 2026 ACM/IEEE 53rd International Symposium on Computer Architecture (ISCA)
   – https://ieeexplore.ieee.org/xpl/conhome/11617393/proceeding
2. 2025 ACM/IEEE 52nd International Symposium on Computer Architecture (ISCA)
   – https://dl.acm.org/doi/proceedings/10.1145/3695053
3. 2024 ACM/IEEE 51st International Symposium on Computer Architecture (ISCA)
   – https://ieeexplore.ieee.org/xpl/conhome/10609566/proceeding
4. 2023 ACM/IEEE 50th International Symposium on Computer Architecture (ISCA)
   – https://dl.acm.org/doi/proceedings/10.1145/3579371
5. 2022 ACM/IEEE 49th International Symposium on Computer Architecture (ISCA)
   – https://dl.acm.org/doi/proceedings/10.1145/3470496
6. ASPLOS '26: Proceedings of the 31st ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 1
   – https://dl.acm.org/doi/proceedings/10.1145/3760250
7. ASPLOS '26: Proceedings of the 31st ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 2
   – https://dl.acm.org/doi/proceedings/10.1145/3779212
8. ASPLOS '25: Proceedings of the 30th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 1
   – https://dl.acm.org/doi/proceedings/10.1145/3669940
9. ASPLOS '25: Proceedings of the 30th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 2
   – https://dl.acm.org/doi/proceedings/10.1145/3676641
10. ASPLOS '25: Proceedings of the 30th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 3
    – https://dl.acm.org/doi/proceedings/10.1145/3676642
11. ASPLOS '24: Proceedings of the 29th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 1
    – https://dl.acm.org/doi/proceedings/10.1145/3617232
12. ASPLOS '24: Proceedings of the 29th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 2
    – https://dl.acm.org/doi/proceedings/10.1145/3620665
13. ASPLOS '24: Proceedings of the 29th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 3
    – https://dl.acm.org/doi/proceedings/10.1145/3620666

14. ASPLOS '24: Proceedings of the 29th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 4 – https://dl.acm.org/doi/proceedings/10.1145/3622781

15. ASPLOS '23: Proceedings of the 28th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 1 – https://dl.acm.org/doi/proceedings/10.1145/3567955

16. ASPLOS '23: Proceedings of the 28th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 2 – https://dl.acm.org/doi/proceedings/10.1145/3575693

17. ASPLOS '23: Proceedings of the 28th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 3 – https://dl.acm.org/doi/proceedings/10.1145/3582016

18. ASPLOS '23: Proceedings of the 28th ACM International Conference on Architectural Support for Programming Languages and Operating Systems, Volume 4 – https://dl.acm.org/doi/proceedings/10.1145/3623278

19. ASPLOS '22: Proceedings of the 27th ACM International Conference on Architectural Support for Programming Languages and Operating Systems – https://dl.acm.org/doi/proceedings/10.1145/3503222

20. ASPLOS '21: Proceedings of the 26th ACM International Conference on Architectural Support for Programming Languages and Operating Systems – https://dl.acm.org/doi/proceedings/10.1145/3445814

21. 2026 IEEE International Symp. on High-Performance Computer Architecture (HPCA) – https://ieeexplore.ieee.org/xpl/conhome/11408404/proceeding

22. 2025 IEEE International Symp. on High-Performance Computer Architecture (HPCA) – https://ieeexplore.ieee.org/xpl/conhome/10946287/proceeding

23. 2024 IEEE International Symp. on High-Performance Computer Architecture (HPCA) – https://ieeexplore.ieee.org/xpl/conhome/10476359/proceeding

24. 2023 IEEE International Symp. on High-Performance Computer Architecture (HPCA) – https://ieeexplore.ieee.org/xpl/conhome/10070856/proceeding

25. 2022 IEEE International Symp. on High-Performance Computer Architecture (HPCA) – https://ieeexplore.ieee.org/xpl/conhome/9773179/proceeding