

# CS554 Homework

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## Cryptographic Hashing

### Instructions:

- *Assigned date: Thursday April 6<sup>th</sup>, 2023*
- *Due date: 11:59PM on Wednesday April 12<sup>th</sup>, 2023*
- *Maximum Points: 3*
- *This assignment must be done individually*
- *Please post your questions to BB*
- *Only a softcopy submission is required to BB*
- *No late submission will be allowed on this assignment*

### Overview

You are to read the BLAKE3 paper that discusses in detail the BLAKE3 cryptographic hashing algorithm and its performance compared to SHA256 as well as other cryptographic hashing algorithms.

<https://github.com/BLAKE3-team/BLAKE3-specs/blob/master/blake3.pdf>

Your review must be written in a narrative form, with bullets when appropriate. You are to generate a PDF file and submit it on BB before the deadline. You must do these reviews individually.

Your review should include the following information:

- Reviewer name (that is you)
- Paper title
- Paper authors
- Publication venue (conference, workshop, or journal name)
- Year of publication
- Paper summary (150~300 words); Clearly state the nature of the work (e.g. implementation of a real system, simulation, theoretical, empirical performance evaluation, survey, etc)
- What are the core contributions of this paper (1~3 items)
- How is this work/solution different than related work (<300 words)?
- Pros: Identify 3 things that this paper does well
- Cons: Identify 3 things that this paper could do better
- Identify 1 thing that the author could do that would make the paper better
- Identify 1 thing that someone could pursue as future work (that is not identified in the paper already)

Your review should be 1 to 2 pages long. It is expected that you spend several hours for each paper to read and writeup this review.