## David Liben-Nowell

## Department of Computer Science

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# Discrete Mathematics for Computer Science 

OR

## (A Bit of) The Math that Computer Scientists <br> Need to Know

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# To MDSWM, with never-ending appreciation, and 

# in loving memory of my grandfather, Jay Liben, who <br> brought more joy, curiosity, and kvetching to this 

## world than anyone else I know.

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> Would thou hadst less deserved,
> That the proportion both of thanks and payment Might have been mine! only I have left to say, More is thy due than more than all can pay.

William Shakespeare (1564-1616)<br>The Scottish Play

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David Liben-Nowell<br>Northfield, MN<br>May 2017

PS: I would be delighted to receive any comments or suggestions from readers. Please don't hesitate to get in touch.

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