

# MATH60005/70005: Optimization

## (Autumn 22-23)

### Week 5: Stochastic Gradient Descent

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Learning Outcome	Check
I understand the computational advantage of using Kaczmarz algorithm for solving a linear system	
I understand that randomizing Kaczmarz algorithm can improve its convergence.	
I can establish a link between Kaczmarz and solving a LLS problem using gradient descent.	
I appreciate that for certain type of costs arising in nonlinear regression, the computation of the gradient can be extremely expensive.	
I can interpret the convergence result for stochastic gradient descent.	

