



Navigating the Data Storm

Strategic Mastery for Sustaining Technical Excellence Amid Industry Shifts

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- (N) Solid foundational knowledge
- (S) Efficient learning
- (W) Business understanding
- (E) Soft skills
- (SW) AI



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Slide title

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Context



The Data Science Storm

Rapid industry changes

Emergence of open-source technologies

AI reshaping biometrics





Context



Key pillars of strategic mastery:

1. Solid foundational knowledge
2. Efficient learning
3. Business understanding
4. Soft skills
5. Vision for the future

The Foundation of Success

Importance of foundational knowledge:

Algorithms

Data structures

Mathematics

Biological sciences



Mastering Tools for the Long Term



Visual Studio Code



SQL



git

•[RegEx]*

Efficient Learning

Prioritize skills

Use spaced repetition, deliberate practice

Stay informed through conferences and industry trends



Vision and Planning

Set clear learning objectives

Have a career vision

Stay consistent



Business Understanding

Understanding business context
Regulatory requirements (CDISC)
Delivering patient-centered results



Business Understanding

Importance of communication, collaboration
Resilience and adaptability in a changing industry



The Rise of AI

AI as a co-navigator

Opportunity to become the "10X programmer"

Mastering AI tools like Generative AI, prompt engineering

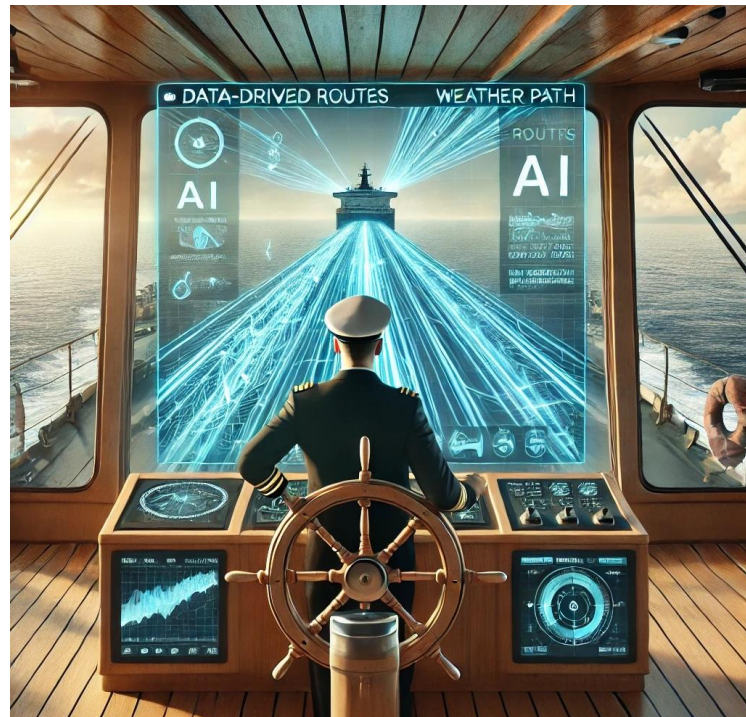


Humans and AI as Co-Navigators

AI is not replacing us, but enhancing us

Ethical responsibilities in using AI

AI empowers experienced professionals, reduces reliance on junior programmers



Charting the Course Forward

Future of AI-driven data science

Importance of continuous learning

Guiding the industry toward innovation



Conclusion



This storm isn't ending, but with the right

Doing now what patients need next

