

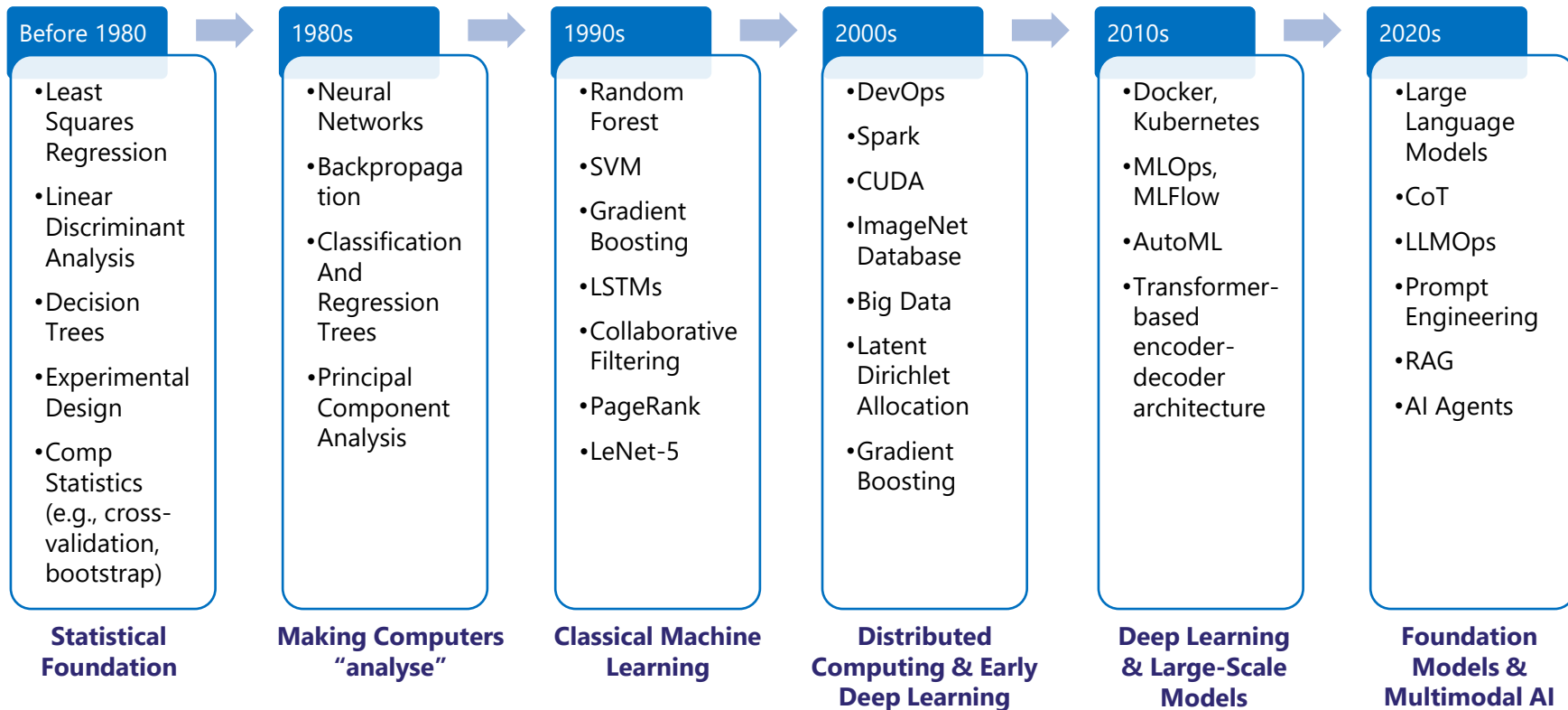
GOVTECH
SINGAPORE

From Raw Data to Deployment: A Journey with AI Coding Assistant

26 May 2025

Victor Ong, Lead Data Scientist

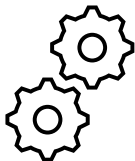
AI has evolved significantly since its statistical origins



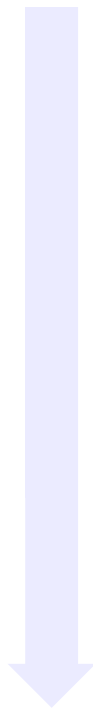
Improved Accessibility to both Science and Engineering



Science



Engineering



Data Preparation

Create Feature,
Clean Data

Exploratory Data Analysis

Statistics,
Visualization

Model Development

Select,
Tune

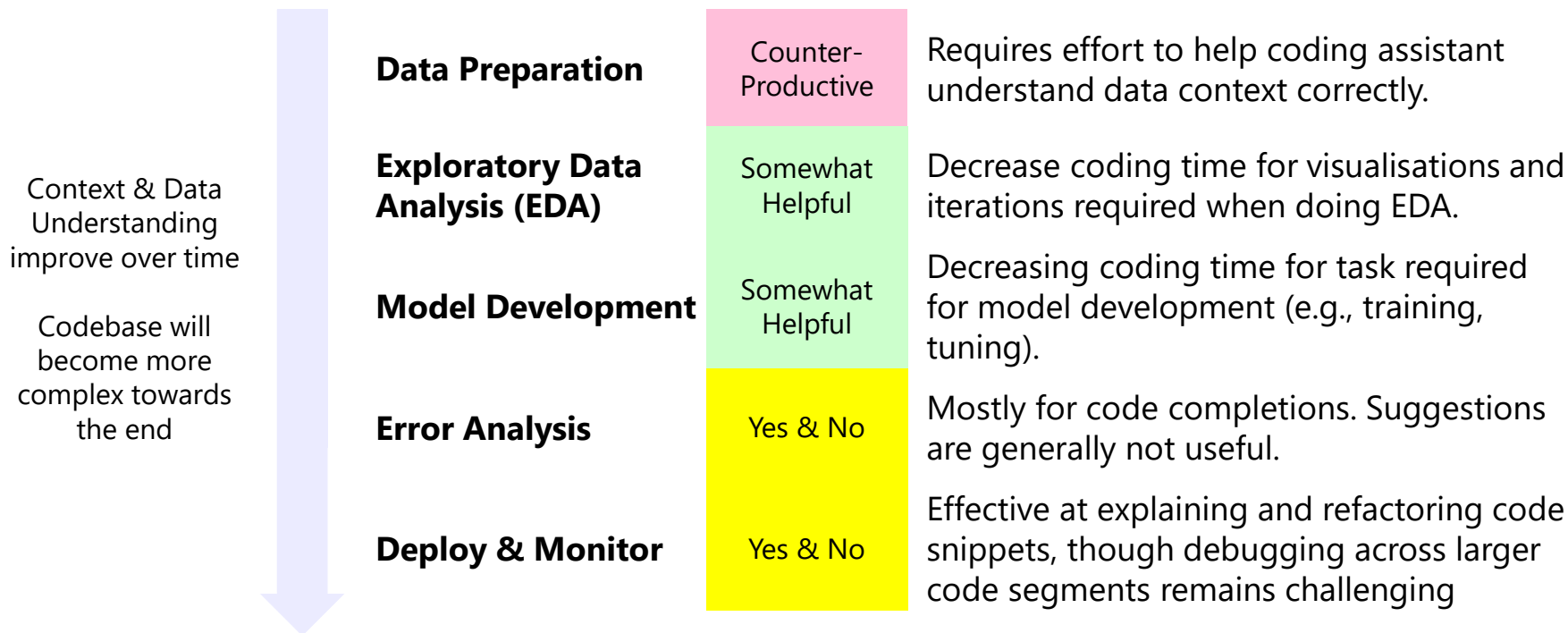
Error Analysis

Evaluate,
Diagnose

Deploy & Monitor

CI/CD, Backend,
Frontend

Already Beneficial, Despite Limitations



A Companion to Enhance Data Scientists' Capabilities

- Enable data scientists to broaden their expertise to include more engineering disciplines:
 - Software development
 - DevOp, MLOps
 - System Design
 - Data Engineering
- AI coding assistants will grow more sophisticated, and we will evolve alongside them.
- However, AI is still fundamentally different from human intelligence. Unless there is some technological breakthroughs, they will likely retain inherent limitations.