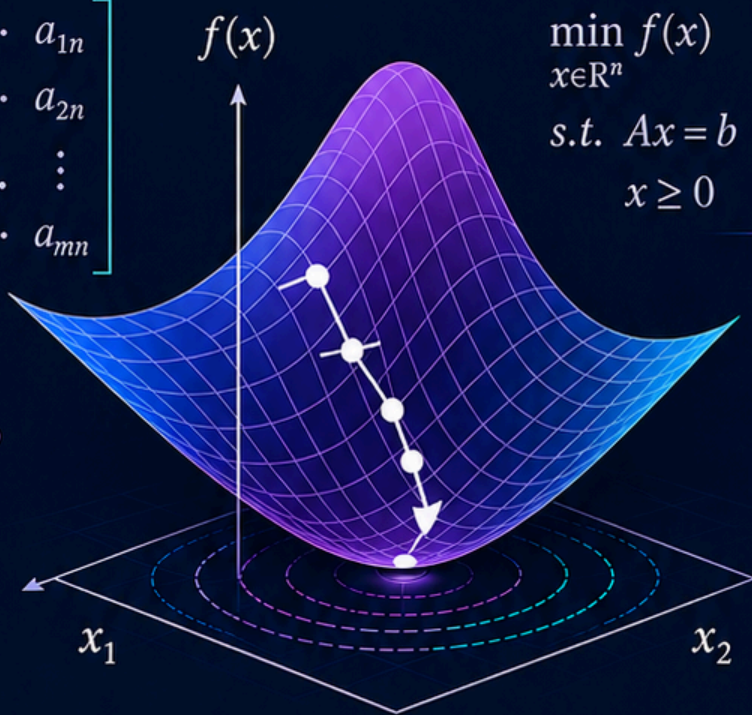
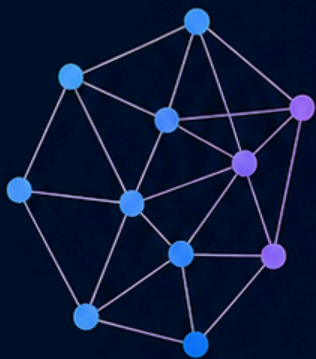


Numerical Linear Algebra and Optimization for Data Science

ALGORITHMS • THEORY • APPLICATIONS

$$A = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{bmatrix}$$

$$\begin{aligned} \min f(x) \\ x \in \mathbb{R}^n \\ \text{s.t. } Ax = b \\ x \geq 0 \end{aligned}$$



Khalide Jbilou • Marcos Raydan



LINEAR ALGEBRA
FOUNDATIONS



NUMERICAL
ALGORITHMS



OPTIMIZATION
METHODS



DATA SCIENCE
APPLICATIONS