

Reading List

1. Book on Linear Programming by Bob Vanderbei

- Chapter 1 (Introduction)
- Chapter 2 (Simplex Method)
- Chapter 5 (Duality)

2. Book on Integer Programming by L. Wolsey

- Chapter 1 (Formulations)
- Chapter 2 (Optimality, Relaxations, and Bounds)
- Chapter 7 (Branch and Bound)
- Chapter 8 (Cutting Plane Algorithms)

3. Piecewise-Linear Approximation

- Padberg, M. (2000). Approximating separable nonlinear functions via mixed zero-one programs. *Operations Research Letters*, 27(1), 1–5.
- Sherali, H. D. (2001). On mixed-integer zero-one representations for separable lower-semicontinuous piecewise-linear functions. *Operations Research Letters*, 28(4), 155–160.
- Vielma, J. P., Ahmed, S., & Nemhauser, G. (2010). Mixed-integer models for nonseparable piecewise-linear optimization: Unifying framework and extensions. *Operations Research*, 58(2), 303–315.
- Gunnerud, V., & Foss, B. (2010). Oil production optimization – A piecewise linear model, solved with two decomposition strategies. *Computers & Chemical Engineering*, 34(11), 1803–1812.
- Silva, T. L., & Camponogara, E. (2014). A computational analysis of multidimensional piecewise-linear models with applications to oil production optimization. *European Journal of Operational Research*, 232, 630–642.