Further Reading

Laurent Hascoët
Paul Hovland
Jan Hückelheim
Sri Hari Krishna Narayanan

SIAM AN24 Student Days

- ▶ High-order derivatives
- ▶ Computational graphs and AD as graph transformations
- ▶ Extended Jacobians and AD as matrix transformations
- ▶ Beyond forward and reverse: cross-country accumulation, interface contraction, and scarcity
- ▶ Piecewise linearization and abs-normal form

Useful resources

- A. Griewank and A. Walther. 2008. Evaluating Derivatives: Principles and Techniques of Algorithmic Differentiation (Second ed.). SIAM.

- U. Naumann. 2012. The Art of Differentiating Computer Programs: An Introduction to Algorithmic Differentiation. SIAM.

- A. G. Baydin, B. A. Pearlmutter, A. A. Radul, J. M. Siskind. Automatic differentiation in machine learning: a survey. The Journal of Machine Learning Research, 18(153):1–43, 2018