Algorithm 1: Backfitting algorithm

1. Set $\hat{\beta}_0 = \bar{y}$ and $\hat{\mathbf{s}}_d = 0$ for $d = 1, \ldots, D$
2. **for** $d = 1, \ldots, D$ **do**
   1. Calculate partial residuals:
   $$\mathbf{e}^d = \mathbf{y} - \hat{\beta}_0 - \sum_{k \neq d} \hat{\mathbf{s}}_d.$$
   2. Set $\hat{\mathbf{s}}_d$ equal to the result of smoothing $\mathbf{e}^d$ with respect to $\boldsymbol{x}_d$.

   end
3. Repeat 2 until convergence.