Octo+

`Formula extractor`

Extracting from input/output specifications
(using industry-grade tentacles)

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The Problem

Migrating Legacy systems

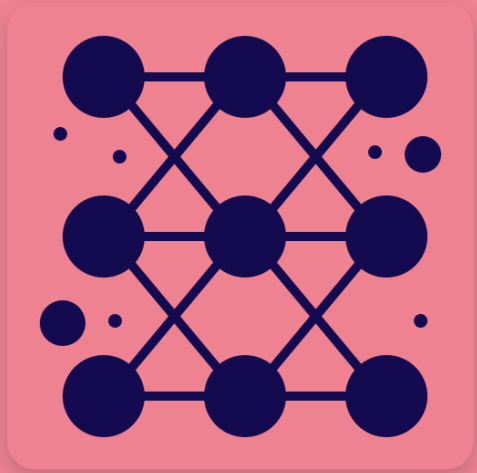
such that inputs and outputs are **reproducible**

Solution

Training multi-polynomial Models

using **coefficients** to build a (~100% accurate) generalizable system on the given data

We remove insignificant coefficients based on **Lasso** regularization



Polynomial Regression
Dataset #1 *simple*
Best model: 2nd degree Polynomial
Root Mean Squared Error: **0.002**

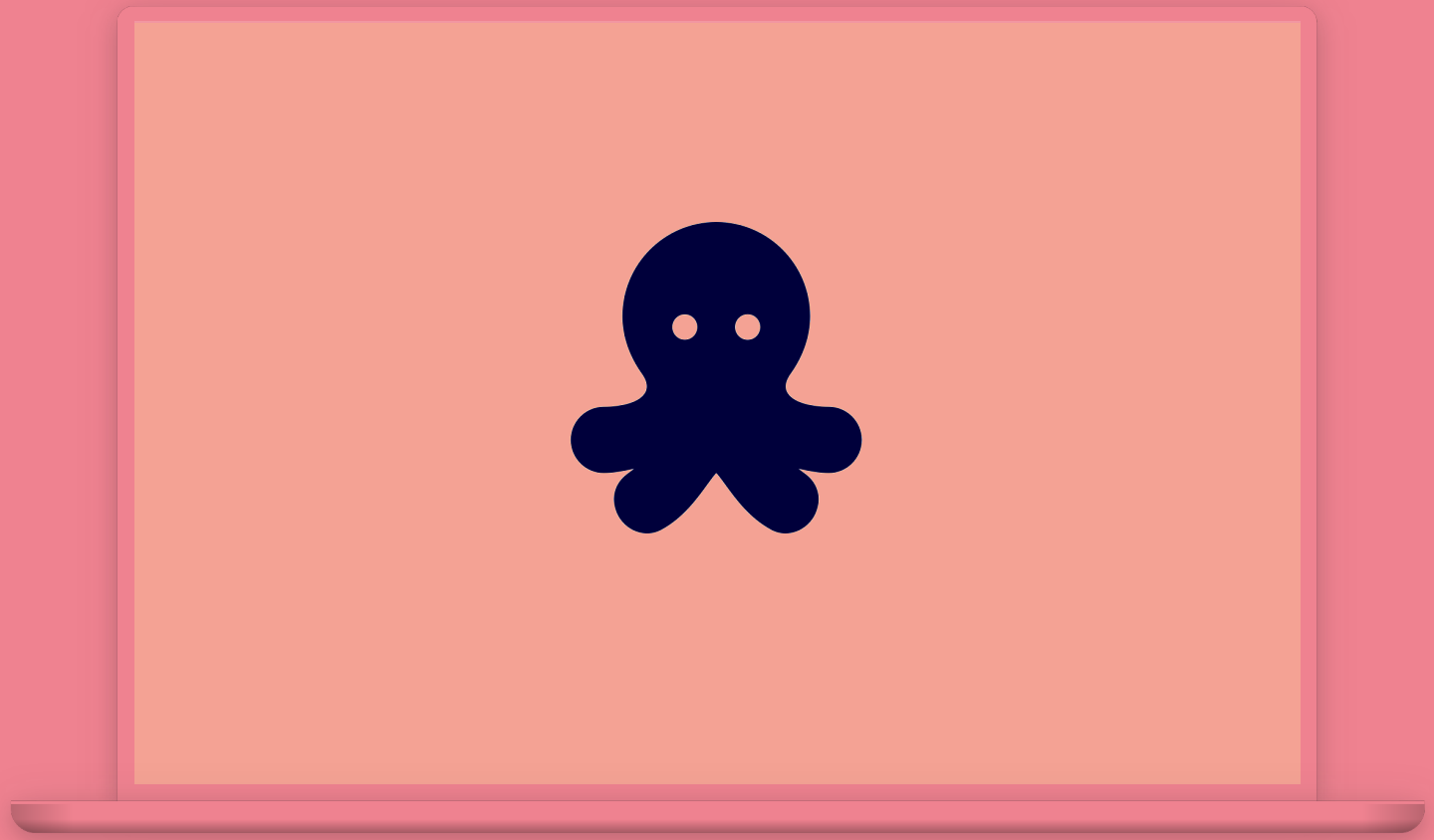
Dataset #2 *period*
Best model: 3rd degree Polynomial
Root Mean Squared Error: **0.003**

Polynomial Regression
Dataset #3 *lookup*
Best model: 3rd degree Polynomial
Root Mean Squared Error: **0.003**

Dataset #4 *reference*
Best model: 3rd degree Polynomial
Root Mean Squared Error: **0.003**

Time for a demo!

Generating formulas from input/output specifications.



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- completely **automated** for a given set of data
- **~100% accurate** based on polynomial coefficients
- Possibility for **generalized formula** for a diverse dataset

Thanks!