DEMO article

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***Abstract*—Pandoc template for IEEE style papers, supprot figures, (ordered and unordered) lists, tables, algorithms(via raw latex) and ieee-style bibliography.**

***Index Terms*—Pandoc template; IEEE format; Whatever**

I. Outline

- Pandoc template for my weekly report in my research group meeting
- What's in this demo:
  1. Figures, like Fig. 1, Tables, like Tbl. I, Equations, like Eq. 1
  2. Algorithms
  3. IEEE style bibliography[1, 2, 3, 4, 5, 6]

II. DEMO

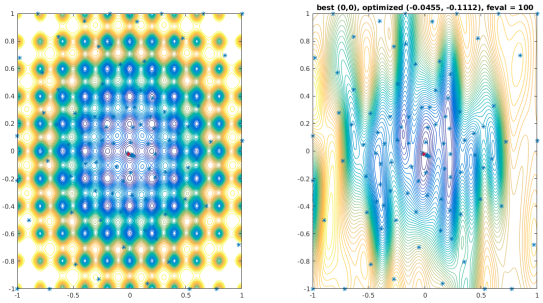

Fig. 1. Ackley function and the model after optimization

$$a^2 + b^2 = c^2 \tag{1}$$

Algorithm 1 Bayesian Optimization

```
Initial Sampling
Construct GP model
for t = 1, 2, ... do
    Find x_t that minimizes LCB
    Sample y_t = f(x_t) + ε_t
    Update GP model
end for
return best f(x) recorded during iterations
```

TABLE I: A Table

Language	Good or Bad
Haskell	Good
PHP	Bad

References

[1] I. Couckuyt, T. Dhaene, and P. Demeester, "ooDACE toolbox: A flexible object-oriented kriging implementation.," *Journal of Machine Learning Research*, vol. 15, no. 1, pp. 3183–3186, 2014.

[2] C. E. Rasmussen, "Gaussian processes for machine learning," 2006.

[3] B. Shahriari, K. Swersky, Z. Wang, R. P. Adams, and N. de Freitas, "Taking the human out of the loop: A review of bayesian optimization," *Proceedings of the IEEE*, vol. 104, no. 1, pp. 148–175, 2016.

[4] M. A. Gelbart, "Constrained bayesian optimization and applications," PhD thesis, 2015.

[5] B. Liu, D. Zhao, P. Reynaert, and G. G. Gielen, "Gaspad: A general and efficient mm-wave integrated circuit synthesis method based on surrogate model assisted evolutionary algorithm," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 33, no. 2, pp. 169–182, 2014.

[6] A. Melkumyan and F. Ramos, "Multi-kernel gaussian processes," in *IJCAI Proceedings-International Joint Conference on Artificial Intelligence*, vol. 22, 2011, p. 1408.