

# ANDREW Y. K. FOONG

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Google Scholar: <https://scholar.google.com/citations?user=2U0jgIUAAAAJ&hl=en>

## EDUCATION

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**Ph.D. in Engineering, University of Cambridge**      October 2018 - Present  
Ph.D. in Machine Learning at the Computational and Biological Learning Lab under Dr. Richard E. Turner. Research on Bayesian deep learning, uncertainty estimation and meta-learning.

**MEng and BA in Engineering, University of Cambridge**      October 2014 - June 2018  
*First Class Honors with Distinction*  
Specialised in information engineering, with master's project on approximate inference and information theory. First and second percentile in year group for first three years, awarded Institution of Engineering and Technology Prize in 4th year.

## PAPERS

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- **Andrew Y. K. Foong\***, Wessel P. Bruinsma\*, Jonathan Gordon\*, Yann Dubois, James Requeima, Richard E. Turner. Meta-Learning Stationary Stochastic Process Prediction with Convolutional Neural Processes. In *Neural Information Processing Systems*, 2020. Accompanying blog: <https://yanndubs.github.io/Neural-Process-Family>
- **Andrew Y. K. Foong\***, David R. Burt\*, Yingzhen Li, Richard E. Turner. On the Expressiveness of Approximate Inference in Bayesian Neural Networks. In *Neural Information Processing Systems*, 2020.
- Tim Pearce, **Andrew Y. K. Foong**, Alexandra Brintrup. Structured Weight Priors for Convolutional Neural Networks. In *Uncertainty in Deep Learning Workshop, ICML*, 2020.
- **Andrew Y. K. Foong\***, David R. Burt\*, Yingzhen Li, Richard E. Turner. Pathologies of Factorised Gaussian and MC Dropout Posteriors in Bayesian Neural Networks. In *Bayesian Deep Learning Workshop, NeurIPS*, 2019.
- Jonathan Gordon\*, Wessel P. Bruinsma\*, **Andrew Y. K. Foong**, James Requeima, Yann Dubois, Richard E. Turner. Convolutional Conditional Neural Processes. In *International Conference on Learning Representations*, 2020. (Oral presentation)
- **Andrew Y. K. Foong**, Yingzhen Li, José Miguel Hernández-Lobato, Richard E. Turner. 'In-Between' Uncertainty in Bayesian Neural Networks. In *Uncertainty in Deep Learning Workshop, ICML*, 2019. (Oral presentation)

## REVIEWING

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- Bayesian Deep Learning Workshop, NeurIPS 2019
- Uncertainty in Deep Learning Workshop, ICML 2020
- AISTATS 2021

## EXPERIENCE

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### Cambridge University Engineering Department

2018 - Present

*Undergraduate Supervisor (analogous to US teaching assistant)*

- Supervised third-year undergraduates in small group teaching for the modules 3F7 Information Theory and 3F8 Inference.

### Cambridge University Engineering Department

Summer 2016

*Undergraduate Research Opportunities Program*

- Research under Prof. Robin Langley at the dynamics and vibration group on the theoretical foundations of statistical mechanics. Wrote molecular dynamics simulation programs.

## AWARDS AND SCHOLARSHIPS

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### Trinity Hall Research Studentship

2018-2021

Ph.D. Funding.

### George and Lilian Schiff Foundation Studentship

2018-2021

Ph.D. Funding.

### Institution of Engineering and Technology Prize

2018

For outstanding students who have completed an IET accredited course.

### Institution of Civil Engineers Baker Prize

2017

Awarded to the two highest scoring students in the third year Engineering course.

### BP First Year Prize

2015

Awarded to the four highest scoring students in the first year Engineering course.

## CODING LANGUAGE PROFICIENCIES

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- Python
- MATLAB

## REFERENCES

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Available upon request.