# Cat P. Le

# **Machine Learning Scientist**

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### EDUCATION

### WORK EXPERIENCE

2018 - Now **Duke University** 

Ph.D. Electrical/Computer Engineering

Advisor: Vahid Tarokh

GPA: 3.94

2016 - 2017 **California Institute of Technology** 

> M.S. Electrical Engineering Advisor: Babak Hassibi

GPA: 4.00

2014 - 2016 **Rutgers University–New Brunswick** 

B.S. Electrical/Computer Engineering

GPA: 4.00

Jun 2022 -

Research Scientist Intern

Sep 2022 Amazon

> Analyze the open-domain dialogs via sentiment analysis, response analysis and text classification. Develop opendomain dialog evaluation system

based on BERT, LSTM.

Jul 2017 -Aug 2018 **Software Engineer** 

Motorola Solutions

Design hardware and firmware for license plate recognition camera. Improve the OCR algorithm of the

camera.



# **PUBLICATIONS AND HONOR**

C. P. Le, L. Dai, M. Johnston, Y. Liu, M. Walker, R. Ghanadan, "Improving Open-Domain Dialog Evaluation with a Counterfactual LSTM," in Diversity in Dialogue Systems, IWDSD, 2023.

Aloui, A., Dong, J., Le, C. P., and Tarokh, V., "Causal Knowledge Transfer from Task Affinity," submitted to ICLR, 2023.

C. P. Le, J. Dong, M. Soltani, and V. Tarokh, "Task affinity with maximum bipartite matching in few-shot learning," in International Conference on Learning Representations, 2022.

Le, C.P., Soltani, M., Dong, J., & Tarokh, V. (2021). Fisher Task Distance and Its Applications in Neural Architecture Search and Transfer Learning. IEEE Access 2022.

Le, C. P., Soltani, M., Ravier, R., & Tarokh, V. (2021, June). Taskaware neural architecture search. In 2021 International Conference on Acoustics, Speech and Signal Processing (ICASSP).

Le, C. P., Zhou, Y., Ding, J., & Tarokh, V. (2020, May). Supervised **Encoding for Discrete Representation Learning.** In 2020 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) (pp. 3447-3451).

Nikola Tesla Scholar Columbia University

**Summa Cum Laude Rutgers University** 

**Matthew Leydt Award** Rutgers University

John B. Smith Award Rutgers University

**Outstanding Engineering Scholar** Rutgers University

E. M. Toomey Scholarship Rutgers University

Tau Beta Pi & Eta Kappa Nu Rutgers University



## **INTERESTS**

**Deep Learning Computer Vision Meta Learning Transfer Learning**  **Few-shot Learning Neural Architecture Search Multi-task Learning** Signal & Image Processing



# **SKILLS**

Python	****	Pytorch
MATLAB	****	Numpy
C/C++	****	<b>Pandas</b>
LabVIEW	****	OpenC\

