Cat P. Le

Machine Learning Scientist

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EDUCATION

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

WORK EXPERIENCE

Jun 2022 - Sep 2022 **Research Scientist Intern**
Amazon
Analyze the open-domain dialogs via sentiment analysis, response analysis and text classification. Develop open-domain dialog evaluation system based on BERT, LSTM.

Jul 2017 - Aug 2018 **System 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). **Task-aware 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++	★★★☆☆	**Pandas**	★★★★★
LabVIEW	★★★★☆	**OpenCV**	★★★★☆