**Xây dựng model phân loại biển báo giao thông**

[**Link File**](https://docs.google.com/document/d/1mkgS4ZKO3kPrdZDlLHYe_XJVI_VmoYEtj0ilNNbfC9E/edit?usp=sharing)

1. Speakers

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[**Ba Ngoc**](https://developers.google.com/community/experts/directory/profile/ngoc-ba) is the Founder of VietAI Hanoi. He loves programming and machine learning and strongly believes that “Machines are capable of getting past the limits of human speed in the future”. He won Singapore UNESCO Open Data and Science Hackathon 2018. Besides, he has been writing a blog named “Learn machine learning in two months” and earn more than 1100 stars on Github. In 2018, he and his friends published an I/O Extended Hanoi App and it was rapidly featured as top 1 under event category on Google Play. At VietAI, he's enthusiastic about teaching students Logistic Regression and Neural Network. In 2019, Ngoc was recognized by Google as the first Google Developer Expert in Machine Learning in Vietnam.

[**https://developers.google.com/community/experts/directory/profile/profile-ngoc\_ba**](https://developers.google.com/community/experts/directory/profile/profile-ngoc_ba)

# **2. Một số đường dẫn quan trọng**

1. [Link dataset](https://d17h27t6h515a5.cloudfront.net/topher/2017/February/5898cd6f_traffic-signs-data/traffic-signs-data.zip)
2. [Link pre trained model](https://github.com/bangoc123/learn-machine-learning-in-two-months/blob/master/tf2.0/traffic-signs-classification/ngocnet.h5)
3. [Link nhãn](https://docs.google.com/document/d/1KlavfVAerQFibtuNL7HEZUitXwRK4oNbiYXd0pRIzjQ/edit?usp=sharing)
4. [Website dataset](http://benchmark.ini.rub.de/?section=gtsrb&subsection=dataset)
5. [Link final code](https://colab.research.google.com/drive/1rYfyDAYP-jvkCLfMotmCQarQahLNJkTa)

# 3. Nội dung tham khảo trước

Video giới thiệu về Machine Learning và nền tảng xây dựng models học giám sát:

<https://www.youtube.com/watch?v=j5HxIJoOJms>

Một số nội dung cần chuẩn bị trước khi xem video:

Nếu bạn là **người chưa học AI:**

1. [Ôn lại kiến thức lập trình Python](https://bangoc-gdg-dot-yamm-track.appspot.com/Redirect?ukey=1_cnUEnc_rMAET4baToDuZTVOBGCeEIELBJC9Jn0ruWk-508994918&key=YAMMID-22048365&link=https%3A%2F%2Fbangoc-gdg-dot-yamm-track.appspot.com%2FRedirect%3Fukey%3D16UOp0Cx8uKYGGkt4iAYugUNhupyGN7buoqLzjy2COTk-1201724489%26key%3DYAMMID-46922360%26link%3Dhttps%253A%252F%252Fgithub.com%252Fbangoc123%252Flearn-machine-learning-in-two-months%252Ftree%252Fmaster%252Fpython-tutorials)
2. [Xem qua mô hình Logistic Regression](https://bangoc-gdg-dot-yamm-track.appspot.com/Redirect?ukey=1_cnUEnc_rMAET4baToDuZTVOBGCeEIELBJC9Jn0ruWk-508994918&key=YAMMID-22048365&link=https%3A%2F%2Fgithub.com%2Fbangoc123%2Flearn-machine-learning-in-two-months%2Ftree%2Fmaster%2Fmodels%2Flogistic-regression)
3. [Xem hướng dẫn sử dụng Google Colab](https://www.youtube.com/watch?v=inN8seMm7UI)

Nếu bạn là người đã **từng học AI** có thể xem thêm:

1. [Nhận diện thời trang với TF 2.0](https://github.com/bangoc123/learn-machine-learning-in-two-months/blob/master/tf2.0/setup-and-first-code.ipynb)
2. [Train models nhận diện 60000 ảnh 32\*32 với bộ dataset CIFAR 10](https://github.com/bangoc123/learn-machine-learning-in-two-months/blob/master/tf2.0/2.SubclassingModel.ipynb)

**Chú ý:** Video mang tính chất thực hành và giới thiệu hơn là đi sâu giải thích các công thức toán học nhàm chán. Đầu ra của buổi học là mỗi cá nhân hiểu được AI là gì và tự xây dựng cho mình một model từ đầu đến cuối.

4 Final Video

Part I: <https://www.youtube.com/watch?v=13J8Id_9B9o>

Part II

<https://youtu.be/98dZscH8b-0>