# Main Page

<https://zindi.africa/competitions/brainhack-til-23-novice-cv>

# Recording of Q&A Session on 15 May

[Recording of Q&A Session on 15 May](https://youtu.be/czUU5YIpyQ8)

# Training Material: Introduction to Platform

[INTRO-0\_Brainhack 2023 Introduction](https://youtu.be/czUU5YIpyQ8)

* Code Environment: <https://colab.research.google.com/drive/1ySmMG8KTSdR3SWv8z2TYrrQ4DzXlgMsw#scrollTo=P-H6Lw1vyNNd&forceEdit=true&sandboxMode=true>

# Training Material: Machine Learning Basics

[ML\_02 Understanding Image Data](https://youtu.be/v11axx_mGeo)

* Code Environment: <https://colab.research.google.com/drive/13XQzLB3LayjnYvf_zyJCCJIOhgZXkPo-#scrollTo=SGIy7NwmvJtg&forceEdit=true&sandboxMode=true>

[ML\_03.0 Introduction to CNN](https://youtu.be/C73g3vcC0FY)

* Code Environment: <https://colab.research.google.com/drive/137yTM09ASdNr9Ma6lL0IKendHA0jZE22#forceEdit=true&sandboxMode=true>

[ML\_04 PyTorch Data pipeline for training](https://youtu.be/6HgmwomKHLw)

* Code Environment: <https://colab.research.google.com/drive/12bQcil18WvIKY8uENrhB80ofnry0X-L0#forceEdit=true&sandboxMode=true>

[ML\_05 PyTorch Training Loop](https://youtu.be/z8QUMLycKZo)

* Code Environment: <https://colab.research.google.com/drive/12DExF-kr8yAsvd9XHyn1k083z-8xSIOM#scrollTo=fjAs7-brmkZI&forceEdit=true&sandboxMode=true>

[ML\_06 Putting it all together Training, Validating and Inferring](https://youtu.be/IdHLchvLfjA)

* Code Environment: <https://colab.research.google.com/drive/11zEvHmO9ufN9W19RNd6Hzz_sCTp1Ks60#forceEdit=true&sandboxMode=true>

# Training Material: CV and OD resources

[CV-OD\_07 Overview and Definition of Object Detection](https://youtu.be/IdHLchvLfjA)

* Code Environment: <https://colab.research.google.com/drive/11yZZwvXQfhmbtv7urNkc6OlQGblMQXCX#forceEdit=true&sandboxMode=true>

[CV-OD\_08 YOLO](https://youtu.be/BEr6mkLEv2U)

* Code Environment: <https://colab.research.google.com/drive/11llsRffbFCbsacTrL0xBO2AV_BOUOLlz#scrollTo=2ZvzwtiXeWaS&forceEdit=true&sandboxMode=true>

[CV-OD\_09 Single Short Detector and Fast R-CNN](https://youtu.be/yzMStDcIo5w)

* Code Environment: <https://colab.research.google.com/drive/11eNYlnVbVS7ZbCzz3wXcYd042Tf4wOuD#scrollTo=HfHOG22ZqovB&forceEdit=true&sandboxMode=true>

[CV-OI\_10 Overview and definition of Object Identification](https://youtu.be/8jVoncZWJjk)

* Code Environment: <https://colab.research.google.com/drive/11VypH6lkVFZfqlVNFCLNT_oXhBMeD_lN#forceEdit=true&sandboxMode=true>

[CV-OI\_11 Siaheremese Network Theory](https://youtu.be/Rl8wQLevNrM)

* Code Environment: <https://drive.google.com/file/u/0/d/11HpeTvSm8LvmwDa972zxelaWx33o1LQr/edit>

[CV-OI\_12 Implementing Siamese Network on Pytorch](https://youtu.be/Rl8wQLevNrM)

* Code Environment: <https://colab.research.google.com/drive/11G3DoJGMCCQJE3c-_0Ru6AYNk-vi6mz7#scrollTo=QWRzO289cJdF&forceEdit=true&sandboxMode=true>

[CV-OI\_13 Contrastive Loss vs Triplet Loss](https://youtu.be/lmWdwbI7xiE)

* Code Environment: <https://colab.research.google.com/drive/10pEXAn60JL8QvTfLobj1K3J_X8wwDviH#scrollTo=PcTOXmgLuVWb&forceEdit=true&sandboxMode=true>