# **OpenMined Hackathon Details**

Date: February 16-18, 2018

On Friday, Saturday, and Sunday, February 16th, 17th, and 18th, the OpenMined community will be gathering in-person in over 20 cities around the world to collaborate on various coding projects and challenges. We'll have a **world-wide video hangout** for all who cannot make it to a physical location. The hackathon will include three coding projects, each with a live tutorial from a member of the OpenMined community. While hackathons will start at the discretion of each city's organizer (slack them for details), **code tutorials** will be *live broadcasted* at 3 different times: 12:00 noon London time, 12:00 noon Eastern time, and 12:00 noon Pacific Time.

# Friday Feb. 16 - Syft & OpenMined Tutorial Support

During the afternoon / evening of January 16th - several main contributors will be online to assist with individuals picking their own projects and/or completing the tutorials from the previous Hackathon - which can be found <a href="https://example.com/here.com/h

Beginner: Build a Neural Network in OpenMined

- **Presentation:** How to use the OpenMined Keras Interface
- Project: Find a new dataset and train a new neural network using the Keras interface!

**Intermediate:** Building the Guts of a Deep Learning Framework

- Presentation: How OpenMined Tensors Work The Magic Under the Hood
- **Project**: Add a feature to Float Tensors

Advanced: Performance Improvements - GPUs and Networking

- **Presentation:** Optimizing the key bottlenecks of the system
- Project: The Need for Speed Picking a Neural Network and Making it Faster

# Saturday Feb. 17 - Presentations

For the Saturday portion of the hackathon, we have several great presentations covering new functionality including the Grid, Reinforcement Learning, and syft.js

#### **ROUND 1:**

Starting 12:30 - London Time - @trask - Architecture Roadmap - Youtube Live Stream

- Grid distributed compute
- Syft private machine learning
- Sonar renumeration and reputation
- Unity accessible uptime and high performance hardware

Starting 13:00 - London Time - @ben & @justin - Grid Tutorial - Youtube Live Stream

- Part 1: How to run your own OpenMined Grid node on AWS Free Tier
- Part 2: How to train a Keras neural network on OpenMined Grid

Starting 16:00 - London Time - @Mike96Angelo - syft.js - Youtube Live Stream

- Intro to new Syft.js Deep Learning Javascript Library
- How to train an MNIST network using syft.js

Starting 17:30 - London Time - @Yann - Reinforcement Learning - Youtube Live Stream

- Several great sample projects
- Pointers toward tutorials

#### **ROUND 2:**

Starting 20:00 - London Time - @trask - Architecture Roadmap - Youtube Live Stream

- Grid distributed compute
- Syft private machine learning
- Sonar renumeration and reputation
- Unity accessible uptime and high performance hardware

Starting 20:30 - London Time - @Yann - Reinforcement Learning Youtube Live Stream

- Several great sample projects
- Pointers toward tutorials

Starting 21:00 - London Time - @ben & @justin - Grid Tutorial - Youtube Live Stream

- Part 1: How to run your own OpenMined Grid node on AWS Free Tier
- Part 2: How to train a Keras neural network on OpenMined Grid

Starting 21:20 - London Time - @Mike96Angelo - syft.js - Youtube Live Stream

- Intro to new Syft.js Deep Learning Javascript Library
- How to train an MNIST network using syft.js

### Sunday Feb. 18 - Support and Demo Day

For the Sunday portion of the hackathon - members will be online to support you in your projects - and we'll be announcing and showing video demos at the end of the day (you'll pre-record demos of the project you complete.)

## **Physical Locations**

Participants in this hackathon will meet in person at the following locations. If your city says "venue tbd", reach out to the Slack Point of Contact for specific details and directions. Starbucks is the suggested backup venue of choice - usually has fast wifi and big tables available. (If you aren't on our Slack, click here for an invite

Location - Point of Contact - Group Channel - Day - Meetup Link (if given)

- London, UK @trask #london Saturday
- Ann Arbor, USA @Nach Dakwale #annarbor Day TBD
- Oxford, UK @trask #oxford Sunday
- Montreal, Canada @gorilliya #montreal Day TBD
- Cleveland, USA @bobby #cleveland Day TBD
- Cincinnati, USA @Chatsam #cincinnati Day TBD
- San Francisco, USA @jeff #thebay Saturday
- Denver, USA @Barton Rhodes #ethdenver2018 Friday, Saturday, Sunday
- Cambridge, UK @JonathanHoltby-HAT #cambridge Day TBD
- New Delhi, India @Aalekh #newdelhi Day TBD
- Zug, Switzerland @stumay75 #zug Day TBD
- Valencia, Spain @cereallarceny #valencia Day TBD
- Minneapolis, USA @tjctracy #twincities Day TBD
- Syracuse, NY @Ankur #syracuse Day TBD
- Paris, France @mortendahl & @Morgan #paris Saturday https://www.meetup.com/Paris-OpenMined-Meetup/events/247580389/
- Amsterdam, Netherlands @adrian.lsk #amsterdam Day TBD
- Bangalore, India @aashay #bangalore Day TBD
- Cambridge, USA @matthewmcateer0 #cambridge-hack Day TBD
- Fairfax, USA @Mike Ninov #fairfax Day TBD

- Munich, Germany @stefan.h #munich Day TBD
- New York City, USA TBD #newyork Day TBD
- Toronto, Canada #toronto @florian https://www.meetup.com/OpenMined-Toronto/events/247580011/
- ... your city here!! reach out to @trask on Slack

# Before you come...

you need to do the following

- <u>Join our Slack</u> and join the #hackathon channel
- Reach out to your city's organizer on Slack!
- Download and Install Unity <a href="https://unity3d.com/">https://unity3d.com/</a>
- Follow the Readme to setup OpenMined and PySyft available here:
   <a href="https://github.com/OpenMined/PySyft">https://github.com/OpenMined/O

OpenMined is a community focused on building technology for the decentralized ownership of data and intelligence. Join our Slack channel to get involved at <a href="https://openmined.org/">https://openmined.org/</a>

Follow: <a href="https://twitter.com/openminedorg">https://twitter.com/openminedorg</a>
Contribute: <a href="https://github.com/OpenMined/OpenMined">https://github.com/OpenMined/OpenMined</a>