# Y20 EdgeX Challenge Shanghai

Edgex Challenge Shanghai 2020 is an international hackathon event on EdgeX, co-hosted by LF Edge and STCSM (Science and Technology Committee of Shanghai  Municipality, http://stcsm.sh.gov.cn/). It's jointly organized by Intel, Innospace, VMware, Dell Technologies, HP, Canonical, ThunderSoft, and supported by Tencent and IOTech.

The event aims to build a learning and sharing platform about deploying IoT & EdgeX Foundry to heal industry problems along with digital transformation. We focuse on pain points of IoT industries, and EdgeX use cases in retail, hospitality, banking, education, manufacturing, energy, cities/campus, and other vertical segments. Through creation, development and optimization of EdgeX based solutions, the participants are required to effectively combine technologies with industry best practices to enable real case demos, and commercial solutions if possible.

**Time:** Jul 3rd ~ Oct end, 2020

**Tracks:**

- Commerce (Retail, Hospitality, Banking, Education, healthcare, cities/campus, …),
- Industrial (Factories, Power, Oil/Gas, Utilities)

**Judge Criteria:**

| Criteria | Preliminary Round | Final Round |
|---|---|---|
| Creativity, use of Computer Vision | 30 | 30 |
| Impact, Viability, and Usefulness | 30 | 30 |
| Simplicity | 30 | 30 |
| Wording & showcase | 10 | 10 |
| # of votes on social media (additional points for final phase) | | max 20 points |

**Prizes:**

| Prizes | Commerce | Industrial | Special prize for EdgeX+CV |
|---|---|---|---|
| 1st | 20,000 RMB *1 | 20,000 RMB *1 | 10,000RMB*2 |
| 2nd | 10,000 RMB *1 | 10,000 RMB *1 | |
| 3rd | 5,000 RMB *1 | 5,000 RMB *1 | |

**Useful links:**

- Event registration website:  http://edgexchallenge.shanghaimakers.com/
- All keynote videos: https://space.bilibili.com/550595847/channel/detail?cid=138775
- Playback of kickoff session in Jul 3rd morning: https://wx.vzan.com/live/tvchat-1971454957?shareuid=319678486&vprid=0&sharetstamp=1593694122085&from=groupmessage&isappinstalled=0#/  (combined with opening of "Shanghai Makers 2020")

- Playback of information session in Jul 3rd afternoon:  https://VMware.zoom.us/j/93350155439?pwd=OTNoUjVVSTRGUWpadjVpUkthOWV4UT09 passcode: 12345
- Blog announcement on LF Edge to call for registration: https://www.lfedge.org/2020/07/14/calling-all-innovators-youre-invited-to-compete-in-the-edgex-foundry-challenge-shanghai-2020/
- Blog announcement on shortlist of 2nd stage of EdgeX Challenge Shanghai: https://www.linkedin.com/pulse/shortlist-final-stage-edgex-challenge-shanghai-announced-melvin-sun/

**List of teams and use cases for 2nd round contest:**

In the preliminary judging stage, judges and experts diligently reviewed each of the submissions based on the criteria set ahead of the EdgeX challenge. 10 teams have been selected from 27 in the Commerce track, 7 teams selected from 13 in the industrial track. These 17 teams will enter next stage of the EdgeX challenge. On Friday afternoon, July 24, the organizers held an online webinar with expert judges and the teams, to witness announcement of the short list.

- Commerce track

| # | Name of the team | Use Cases |
|---|---|---|
| c03 | AI Cooling | Building automation |

| | | |
|---|---|---|
| c05 | NT fighting force | POS with weight scale & Cameras |
| c07 | Starlink team from JD.com | Retail store heatmap & monitoring |
| c08 | Sugarinc Intelligence | Smart building |
| c10 | Five Card Stud fighting force | Automobile 4S (sales, service, spare part, survey) store |
| c16 | USST, YES! | Retail store edge |
| c18 | HYD Miracle Innovation | Apparel store edge computing |
| c19 | Breakthrough Labs | Scenic Intelligent Navigation |
| c26 | i-Design | Edge-cloud based far ocean intelligent logistics/monitor |
| c27 | DreamTech | Mortgage assets monitoring based on blockchain +edge computing |

- Industrial track

| # | Name of the team | Use Cases |
|---|---|---|
| i01 | Baowu Steel | Defects detection in steel manufacture |
| i06 | Jiangxing Intelligence | Intelligent Edge Gateway for Industrial |
| i07 | VSE | Drivers school surveillance & analytics |
| i08 | CyberIOT | Guardians of electrical and mechanical equipment |
| i09 | Smart eyes recognize energy | CV based intelligent system of meters recognition |
| i10 | Power Blazers | autotuning system for orbital wind power system |
| i13 | EVS | Smart warehouse |

**Winners list**

Commerce Track

| **Award** | **Name of team** | **Use Cases** |
|---|---|---|
| **1st** | **i-Design** | **Edge-cloud based far ocean intelligent logistics/monitor** |
| **2nd** | **HYD Miracle Innovation** | **Smart apparel store** |
| **3rd** | **AI Cooling** | **Building automation** |
| **3rd** | **Fangtang Intelligence** | **Smart building management** |
| **AI** | **Starlink team from JD.com** | **Retail store heatmap** |
| Merit | DreamTech | Mortgage assets monitoring based on edge computing blockchain |
| Merit | USST,YES! | Retail store edge |
| Merit | Breakthrough Studio | Scenic intelligent navigation |
| Merit | Five Card Stud fighting force | Automobile 4S (sales, service, spare part, survey) smart store |

Industrial Track

| **Award** | **Name of team** | **Use Cases** |
|---|---|---|
| **1st** | **Power Blazers** | **Autotuning system for orbital wind power system** |
| **2nd + AI** | **Smart eyes recognize energy** | **CV based intelligent system of meters recognition** |
| **3rd** | **Jiangxing Intelligence** | **Intelligent Edge Gateway for Industrial** |
| **Influential** | **Baowu Steel** | **Defect detection in steel manufacturing** |
| Merit | CyberIOT | Guardians of electrical and mechanical equipment |

| | | |
|---|---|---|
| Merit | VSE | Drivers school surveillance & analytics |

**Training Resources:**

Online training sessions on EdgeX for EdgeX Hackathon prospective participants

- 1) Feb 28th : 14:00-15:00, Create EdgeX new Device Services,by VMware (Registration, English), (Playback)
- 2) Mar 6th: 14:00-15:00, Writing EdgeX export service, and scheduling plan,by VMware (Registration, English), (Playback)
- 3) Mar 13th: 14:00-15:00, Add devices and service monitoring in EdgeX, by ThunderSoft (Registration, English), (Playback)
- 4) Mar 20th: 14:00-15:00, Use EdgeX device service, Nodered,by IOTech (Registration, English), (Playback)
- 5) Mar 27th: 14:00-15:00, Use OpenVINO with EdgeX for Edge Inference,by Intel(Registration, English), (Playback)
- 6) Apr 2nd: 14:00-15:00, EdgeX Hackathon station setup(HW,SW, Tools, etc.), by Intel (Registration, English), (Playback)