

3 July 2020

Fact Sheet

BRAINHACK 2020

TESTIMONIALS FROM PARTICIPANTS

SeeTrue Workshops

“I learn best when I’m doing something hands-on, so it was exciting to have the opportunity to train my own machine learning algorithm. SeeTrue workshop definitely sparked an interest in machine learning, so I will probably want to take a machine learning course next semester in school. I hope to continue my path in technology and do work that is meaningful, that will help others.”

- **Tan Xinyi, Nicole (Singapore Management University, studying Information Systems)**

“My favourite part was experimenting with the code. It’s very easy to understand the general idea of how AI and machine learning works. But to actually go down to every detail and see how all the data is pre-processed before the model is created – I think that’s definitely more insightful than just reading or watching videos about machine learning online.”

- **Lee Shiyi Michael (National University of Singapore, studying Electrical Engineering)**

“I think the coding lesson and competition were very interesting. I was surprised that so much is taught in so little time at the coding workshop. The competition was fun too. They provided a general framework that guided us from the start.”

- **Ho Xin Yi Felice (Singapore University of Technology and Design)**

“The SeeTrue workshop was interesting because we learned how to identify fake news. Although I have learnt about some of the machine learning algorithms, I have never put them into actual use. During the programme, I was able to apply the algorithm to identify fake images and that was pretty awesome.”

- **Soh Yan Zhang (Nanyang Technological University, studying Mechanical Engineering)**

CODE_EXP Hackathon

“This year’s online hackathon format was a big factor in deciding to join, because it was much more convenient than having to be physically present during the event. We could code from wherever we were, and that allowed the team members, who are serving our National Service, to participate despite our NS commitments.”

“The way the hackathon was scoped was very effective in helping us learn about mobile app development and cloud computing. It was definitely a good stepping stone if we want to branch out to this field in the future. Code_EXP also provided us with the opportunity and tools to work on a real-world problem and develop real-world solutions. A few weeks after our hackathon ended, I read in the news about an app that compares prices between goods in Singapore. The concept of using data to help users make informed choices is similar to ours, which reinforced the notion that mobile apps can indeed be useful in our lives.”

- Ho Jun Xiong, Nicholas (will be entering University of Cambridge to study Engineering)

“This hackathon gave us an opportunity to push ourselves, as we had an end goal in mind. Since it was a competition, we really felt the pressure of performing. It also motivated us, and we got to learn how to use new technology together as a team – that was what made the hackathon really fun!”

- Tan Guan Yew (National University of Singapore, studying Computer Engineering)

“I had just finished my National Service a few months ago, and I was looking at ways to occupy myself. One particular area I wanted to look into was mobile app development and I thought the best way to learn was to force myself to learn through a hackathon, and DSTA provided that opportunity with CODE_EXP. It was an eye-opening and rewarding experience!”

- Ravyu Sivakumaran (will be entering University of Illinois Urbana-Champaign to study Computer Science)

“The best part was when, after three days three nights of coding, the app actually worked! We were very excited because it was our first time developing an app. We spent a lot of time trying out things, trial and error, debugging, just to make sure it came out as how we imagined it to be.”

- Lim Huai Xing (National University of Singapore, studying Business Analytics)

Today I Learned (TIL) – Artificial Intelligence Camp

“The TIL tasks this year are definitely a step up in difficulty from last year. The introduction of real robots on which we can run our AI models is incredibly challenging and fun! We are able to see for ourselves how AI we develop is applied to our robots to perform search and rescue missions.”

- Velusamy Sathiakumar Ragul Balaji (Singapore University of Technology and Design, studying Information Systems Technology and Design)

“The reason why we enjoy TIL so much is because there isn’t an off-the-shelf code you can just reference and use. The competition forces you to put in original work or modify code. The things we learn at TIL also have many interdisciplinary applications. For our competition task, we applied AI to detect the start and end point of our map. Similarly, AI could potentially be used to detect other things - like perhaps cancerous blood cells in a human body. What we learn today, could translate into meaningful tech solutions in the future.”

- Ho Jie Feng (National University of Singapore, studying Math and Computer Science)

“I thought that DSTA’s TIL was a great place to learn the basics of AI. AI is getting very widely used nowadays, so I think it’s a very useful skill to have. The notebooks provided online were really helpful and I had a good experience overall. I learned a lot and am definitely keen to learn more AI in the future.”

- Gabriel Lee (Singapore Polytechnic, studying Electrical and Electronic Engineering)

Cyber Defenders Discovery Camp

“There’s typically not a whole lot of Capture-The-Flag (CTF) competitions during the summer, so having one during the summer, having one for undergrads only which is fairly rare, and seems to be put on with some amount of production value and quality – it’s definitely interesting and I look forward to joining.

“CTF problems can take like 15 hours on a single problem, 20 hours on a single problem. Being able to commit for that long kind of gives you the ability to work on harder problems that don’t have immediate solutions.”

- Chris Lambert (Carnegie Mellon University, studying Computer Science)

“It’s not like we are doing this for credit or anything, but I think CTFs are a really great way to learn about things you would just never hear about in school, and it’s supplemental knowledge.”

- Valerie Choung (Carnegie Mellon University, studying Computer Science)

“This year, everything is held online, including the competition. The online training was very useful in bridging any gaps in our understanding of cybersecurity, and allowed us to build upon our existing knowledge to learn more about cybersecurity.”

- David Goh Zhe Kai (NUS High School of Mathematics and Science)

-END-

For media queries:

Contact:	Ms Khoo Yin Suen Corporate Communications DSTA
Email:	kyinsuen@dsta.gov.sg

About Defence Science and Technology Agency

The Defence Science and Technology Agency (DSTA), a statutory board under Singapore's Ministry of Defence, exploits science and technology, and provides technological and engineering support for Singapore's defence and security. It delivers leading-edge technological solutions to the Singapore Armed Forces (SAF) by tapping the best technologies and fostering an environment of innovation for defence applications. Its role spans the entire spectrum of capability planning, development, and sustainment of weapon systems throughout their life cycle to ensure that the SAF continue to be a formidable fighting force.

Visit www.dsta.gov.sg for more information.