# My Achievement Summary

Like most academics, I also strongly focus on research publications. However, I have many other skills, talents and perseverance, which make me want to go beyond the traditional limits of scholarship, especially in areas of mass research knowledge dissemination, community building, industry engagement, winning competition and cutting-edge engineering:

## State-of-the-art Research in Al

- I published at many top AI related conferences, including ICRL, AAAI, IJCAI, ECAI, ECCV, AI-STATS and ICDM, as well as many prestigious IEEE Transactions: IEEE-TNNLS, IEEE-TIP, IEEE-T-Signal Processing, IEEE-TKDE, IEEE-T-Mobile Computing and IEEE-T-Cybernetics. I have coauthored with many world-leading scholars, including:
  - Chair Prof Arnoud Doucet of Oxford University & DeepMind
  - Prof Zoubin Gharamanni of Cambridge University & Chief Scientist of Uber,

## Machine learning research MOOCs

- Since 2012, I have been writing one of the most popular A.I. and machine learning research MOOCS in the world. My MOOCs has more than 3,000 slides and covers the full spectrum of A.I. in 52 separate topics. Its popularity can be demonstrated by the 6300 GitHub Stars. In addition, I also created a Mandarin-speaking machine learning video lecture series, which has more than 30,000+ fans/subscribers worldwide across various platforms since October 2015.
- Since I joined HKBU, I have continued my knowledge dissemination work by running two online research tutorials per week (one in English and the other in Mandarin)

#### Leadership experience

I have experiences in different aspects of academic leadership:

- 2008 2009: whilst I was a lecturer at CSU, I led a large research team funded by Newcrest Mining, this successful team was comprised of senior lecturer and associate professors.
- 2012 2015: whilst I was a senior lecturer at UTS, I was the Deputy Head of School (Teaching and Research), School of Computing and Communication (now School of Electrical and Data Engineering) to manage the school's daily operations and strategies for its fifty staff members.
- Since 2015: as an associate professor, I am currently the Director of Machine Learning and Data Analytics Lab at GBDTC, UTS. I have established a sizeable external-engagement team in A.I. and data science research. I created this team from scratch. Currently, the team has expanded to **26** members, almost entirely funded by the industry. The team is composed of scholars, postdoctoral fellows, doctoral students, talented engineers and publicists.

#### Industry engagement

• My previous team in Australia have engaged in industry contract research in finance,

government, transportation, utilities, e-commerce, legal, defense and agriculture sectors. Since late 2015, I have attracted **14** industry partners to fund more than **22** independent research projects.

- I also founded an executive training team, specialized in running bespoke A.I. courses for corporates that have generated significant revenue and developed many new industry partners through it.
- I also consult for several Australian companies.

# **Community Building**

- I have represented Standards Australia for ISO JTC 1/SC42 (Artificial Intelligence) standardizations meetings since 2018.
- I have established one of Australia's largest AI-centric meetup group with more than **4,600** members and an industry host network.
- I also have established a Machine Learning meetup in Hong Kong in 2022.
- I engage and mentor several Australian startups.

## **Engineering Skill**

Despite being a leader, I am an excellent engineer too. I also set an example in practical/engineering/competition skills to motivate my team members:

- I singlehandedly created a real-time computer vision lab at Charles Sturt University (CSU). The lab has many impressive working demos. I modernized it with Deep Learning technologies at UTS.
- I competed and won the NSW Data Analytics Hackethorn in 2015 all by himself.
- My postdoc and I led a UTS team and won the IEEE Conference of Games (CoG) microRTS 2019 competition by a large margin

#### Teaching

• I firmly believe that most outstanding researchers are also outstanding teachers. Because being able to show off the knowledge will motivate scholars to excel in teaching and research alike. Needless to say, I am an excellent teacher from teaching undergraduates to PhD students.