

EDITORIAL

Open Access



# The history and future of scientific phone apps and mobile devices

Samuel Ken-En Gan<sup>1,2</sup>

Mobile apps and devices continue to impact our daily lives. In cities all over the world, smartphones have enabled disruptions (including the Internet of Things or IOT) into daily life for good or bad from transport/daily health tracking to indirectly causing accidents from the lack of situational awareness. Since the launch of this journal in Dec 2015, the smartphone revolution, including the associated IOT, has gained greater ground into scientific research and education than the apps mentioned in the reviews for biomedical research (Gan and Poon 2016) and clinical use (Gan et al. 2016) in the middle of year 2016. There is more scientific and clinical equipment that leverage on the smartphone entering the market and this number is likely to increase further. And this trend will fuel and enable the growth of citizen science in the various disciplines.

One clear benefit of this revolution is the empowerment of people to better manage many aspects of their own health conditions, and such empowerment is likely to percolate into the many disciplines, leading to a foreseeable growth of data and scientific findings. The next bottleneck in some of these disciplines may then be the analysis and the use of such data for extrapolations that would work very well with the current renewed interest in Artificial Intelligence.

At the time of writing this editorial, many cities have officially leveraged on the smartphone revolution in common daily activities. To just name a few of such major initiatives, a visit to the major cities in the rising superpower China will show that “cash is dead” with most transactions performed on the smartphone (Cheng 2017). Further down south, the other highly populated country – India – has also her own official push into being a smart city (Ministry of Housing and Urban Affairs,

Government of India 2018). Even the small country-state of Singapore has also made her own official push (Smart Nation and Digital Government Office 2018). In the United Kingdom, Bristol, overtaking London (2017), is already deep in her push to be a smart city (Bristol: BRISTOL IS OPEN LTD 2018). There are many more examples of major cities leveraging on this revolution, with one review paper in this journal focusing on a pan-Arab wide initiative (Jemni and Khiribi 2017).

Beyond conveniences, the journal is proud to host numerous technology articles aimed at disaster management in a world seeing increased extreme weather conditions and security threats. Examples of such articles include those concerning healthcare during volcanic emergencies (Ashar et al. 2016) and evacuation guidance (Itoi et al. 2017).

Beyond these, the journal is one that bridges commercial applications in the section of application notes, which do not require the free release of source codes or the software/app. In the past 2 years or so, this category has the most number of publications and is an avenue for scientific peer-review of protected technology. With only 21 articles accepted for publication amidst a rapidly growing field, and the imminence of gaining an impact factor, there is clearly much space to grow. Since the conception of the journal in early 2015 when discussions first began with then Springer, the aims to fill in the gaps in this new field has not, and will not change. The journal continues to be a home for high quality articles related to smartphones, IOT, peripheral devices, technology and issues underlying the various disciplines that contribute to the making of Scientific Phone Apps and Mobile Devices, academic or commercial. Nonetheless to meet the rapidly changing nature of this smartphone digital revolution, much more must be done. In the coming months, one major change would be that the journal will soon be transferred away from our current partner Springer Nature in the upcoming journal revamp.

Correspondence: [samueltg@bii.a-star.edu.sg](mailto:samueltg@bii.a-star.edu.sg)

<sup>1</sup>Bioinformatics Institute, Agency for Science, Technology, and Research (A\*STAR), 30 Biopolis Street, #07-01 Matrix, Singapore 138671, Singapore  
<sup>2</sup>p53 Laboratory, Agency for Science, Technology, and Research (A\*STAR), Singapore 138648, Singapore

The journal will also retain the affiliation with the Bioinformatics Institute (BII), Agency for Science, Technology, and Research (A\*STAR) of Singapore, and will be with a different publisher with effect 1 April 2018. While submissions via Springer Nature have now ceased, submissions may still be processed offline for 1 April 2018 launch in the new platform. Interested parties can write to Dr. Samuel Gan at [samuelg@bii.a-star.edu.sg](mailto:samuelg@bii.a-star.edu.sg) or visit [www.facebook.com/APDLab](http://www.facebook.com/APDLab).

#### Authors' contributions

The author read and approved the final manuscript.

#### Competing interests

The author declares that he/she have no competing interests.

#### Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Received: 28 February 2018 Accepted: 28 February 2018

Published online: 19 March 2018

#### References

- University of Bristol. Bristol named as UK's smartest city [online]. 2017. Available: <http://www.bristol.ac.uk/news/2017/october/smart-city.html>. Accessed 20 Jan 2018.
- Ashar M, Suwa H, Arakawa Y, Yasumoto K. Priority medical image delivery using DTN for healthcare workers in volcanic emergency. *Sci Phone Apps Mob Devices*. 2016;2:9.
- Bristol: BRISTOL IS OPEN LTD. 2018. Smart City Research and Development platform [online]. Available: <https://www.bristolisopen.com>. Accessed 2018.
- Cheng E. Cash is already pretty much dead in China as the country lives the future with mobile pay [online]: CNBC; 2017. Available: <https://www.cnbc.com/2017/10/08/china-is-living-the-future-of-mobile-pay-right-now.html>. Accessed 20 Jan 2018.
- Gan SKE, Koshy C, Nguyen PV, Haw YX. An overview of clinically and healthcare related apps in Google and apple app stores: connecting patients, drugs, and clinicians. *Scientific Phone Apps and Mobile Devices*. 2016;2:8.
- Gan SKE, Poon JK. The world of biomedical apps: their uses, limitations, and potential. *Sci Phone Apps Mob Devices*. 2016;2:6.
- Itoi J, Sasabe M, Kawahara J, Kasahara S. An offline mobile application for automatic evacuation guiding in outdoor environments. *Sci Phone Apps Mob Devices*. 2017;3:1.
- Jemni M, Khiribi MK. ALECSO mobile apps initiative. *Sci Phone Apps Mob Devices*. 2017;3:2.
- Ministry of Housing and Urban Affairs, Government of India. 2018. Smart cities [online]. Available: <http://smartcities.gov.in/content/>. Accessed 20 Jan 2018.
- Smart Nation and Digital Government Office. 2018. Smart Nation Singapore [Online]. Available: <https://www.smartnation.sg>. Accessed 20 Jan 2018.

Submit your manuscript to a SpringerOpen<sup>®</sup> journal and benefit from:

- Convenient online submission
- Rigorous peer review
- Open access: articles freely available online
- High visibility within the field
- Retaining the copyright to your article

---

Submit your next manuscript at ► [springeropen.com](http://springeropen.com)

---