S.No	Project Title & Author	Paper Source	Year	Methodology Used	Advantages	Disadvantages
01	COVID-19 Contact-tracing Apps: a Survey on the Global Deployment and Challenges Jinfeng Li and Xinyi Guo	IEEE	2020	Systematic Mapping of the Global Deployment Status	· Use of underpinning technologies like GPS, QR codes, Bluetooth	· trade-off between the data privacy and the insights · different mobile devices exhibit a variety of Bluetooth signal intensity at the ISM band
02	PANDEMIC CONTACT TRACING APPS: DP-3T, PEPP-PT NTK, AND ROBERT FROM A PRIVACY PERSPECTIVE		2020	PEPP-PT based approaches NTK and French ROBERT system and DP-3T	· strong emphasis on resilience of the system · avoid de-anonymization of all user types	· Manual Contact Tracing · Functionality & Scalability · Security and privacy issues in the DP-3T system

						· DP-3T systems are vulnerable to Gossip Attack
03	Towards Defeating Mass Surveillance and SARS-CoV-2: The Pronto-C2 Fully Decentralized Automatic Contact Tracing System			Pronto-B2 and Pronto-C2 and implemented using Blockchain technology	· Pronto-C2 relies on Diffie-Hellman key exchange providing better privacy	· Privacy Attacks for Mass Surveillance · Tracing Infected Users with Trusted Server and Colluding Server · Matrix attack, Brutus attack, Gossip attack, Matteotti attack
04	Privacy-Sensitive Protocols And Mechanisms for Mobile Contact Tracing		2020	Mobile-assisted contact tracing interviews, Narrowcast messages, protocol used-Privacy sensitive,	● Third party free contact tracing ● Confidentiality, Re-Identification	● Attacks like Inferential attacks, Integrity attacks, etc.,

				mobile tracing		• The mobile proximity tracing does not directly inform public authorities who may be a contact .
05	Trust and Transparency in Contact Tracing Applications		2020	Digital Contact Tracing Techniques	• a broad FactSheet template to support transparency of contact tracing applications	• Privacy and coverage • Security and Access
06	Tracking the covid zones through geo-fencing technique		2020	After tracking a suspicious area, a geo-fenced(is a concept of building a virtual perimeter area) layer is	It reduces operational costs by using an automated system based on wireless infrastructure. It also alerts the authority immediately to	• The workflow of the system demands the required data sets

				mapped in the area and then virtual perimeter is used for further processing.	catch the violators.	and permission in a legal manner to set up the environment that maintains the constitutional law and order in practice. ● Privacy concern is debatable.
07	The experience of contact tracing in Singapore in the control of COVID-19: highlighting the use of digital technology Sean Han Sheng Lai & Camelia Qian Ying Tang & Asok Kurup & Gowreeson Thevendran		2020	Contact Tracing and Digital contact tracing(DCT)	TraceTogether does not track location or contacts, and data is stored locally on the phone for 21 days and will not be accessed unless the individual has been identified as a close contact, and measures are in place to	● DCT is not ready to replace the manual and meticulous work ● safeguarding data safety and

					protect the individual's mobile number	patient privacy
08	Privacy, Ethics, and Contact-tracing Apps Teresa Scassa, Jason Millar, and Kelly Bronson		2020	AI-enabled Contact-tracing, Contact-tracing as a Public Health Measure	• Centralized vs Decentralized Data Storage	• insufficient testing, test results may be substantially delayed
09	BlueTrace: A privacy-preserving protocol for community-driven contact tracing across borders Jason Bay, Joel Kek, Alvin Tan, Chai Sheng Hau, Lai Yongquan, Janice Tan, Tang Anh Quy		2020	OpenTrace and Blue Trace	• Data protection and Privacy safegaurds	• Encounter Message replay/relay attack • Implementation-i)Challenges-iOS background bluetooth limitations ii)Difference in transmission power

						across devices
10	Trustless Approaches to Digital Infrastructure in the Crisis of COVID-19 Kelsie Nabben		2020			
11	Development of an Android application for viewing Covid19 containment zones and monitoring violators who are trespassing into it Ranajoy Mallik, Amlan Protim Hazarika, Sudarshana Ghosh, Dilip Sing, Rajib Bandyopadhyay		2020	Firebase cloud Firestore database with location data of containment zones and Geofencing	• updates the locations of the areas in a Google map which are identified to be the containment zones	
12	A survey of COVID19 Contact Tracing Apps Nadeem Ahmed, Regio A. Michelin, Wanli	IEEE	2020	centralised, the decentralised, and the hybrid approaches(	• Data management,privacy and security • Proximity	• Wireless Device Tracking • Location

	Xue, Sushmita Ruj, Robert Malaney, Salil S. Kanhere,Aruna Seneviratne, Wen Hu, Helge Janicke and Sanjay K. Jha			combination of both)	estimation	confirmation • Enumeration attack • Denial of service
13	MoveInSync's Containment Zone Tracker Aims At Democrating Information Flw		2020	Leverages with RESTAPIs to sync with the data and keeps it updated. The map data is overlaid with KMZ files to display the containment zone boundaries.	This covid tracker does not store any personal information provided by the user so it is more secure.	To ensure it is available to all citizens and cities it will tough to maintain that huge amount of data.
14	Defining Covid 19 containment Zone using K-means dynamically		2020	K-means technique of Data Science	• K-means can be adapted to define the micro-level demarcation of containment zones and manage	Information parameters required as per the Govt. of India strategy and containment plan for large outbreaks

					them effectively. • The clusters formed based on COVID-19 patient's locational data using Data Science techniques (specifically K-means) will be agile, unbiased, accurate, visible, economic and easy to apply.	
15	Regionalization for infection control: An algorithm for delineating containment zones		2020	a novel network community detection method, the Human Mobility	The zoning patterns proposed in our algorithm could also allow for more life functions in	It is difficult to effectively contain an epidemic to a small-scale

	considering the regularity of human mobility			Regularity-based Zoning (HuMoRZ) algorithm, to delineate containment zones incorporating mobility regularity.	a zone and more evenly distributed life resources across zones than those of zones generated by other methods.	containment zone
16	Geographical tracking and mapping of coronavirus disease COVID-19/ severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) epidemic and associated events around the world Maged N. Kamel Boulos and Estella M. Geraghty		2020	online/mobile GIS and mapping dashboards and applications for tracking	• improved data sharing and real-time information to support critical decision-making •	
