## 2022 School of EECMS Summer Internship Application Form

Main Supervisor	A/Prof Aneesh Krishna
Other supervisors (if applicable)	
Name of proposed student intern	
Student ID of proposed intern	
Project Title	Developing an automated fact-checking system of the news related to COVID-19 in social media
Project Description	<ul> <li>Social media, a blessing to modern society, has become a major medium to spread rumours and fake news at its darkest site. Some old forms of media are still not that much affected by rumours because of their well-formed and organized editorial body and authenticated sources of information. However, in the case of social media, the news is neither verified by its audiences before further sharing and spreading nor controlled by any well-established body or organization. As a result, a group of dishonest people may create fake news and spread it to satisfy their evil motives. A point worth noting that controlling, even monitoring, the enormous amount of content on the internet is infeasible manually. Hence, to check the integrity and authenticity of the information available and being introduced on the web, automation is the most effective solution.</li> <li>We plan to develop an automated fact-checking system of the news related to COVID-19 and various aspects of its vaccines such as the effectiveness of the vaccines and side effects using geo-spatial time series data mining technique. We are also planning to use Bayesian networks to calculate the likelihood of an event to be truly detected by the trend-analysis system. The proposed system will be helpful to tackle spreading misinformation faster and minimize damage from COVID-19 and future pandemics.</li> <li>Objectives:</li> <li>To develop an automated system for fake news detection based on fact-checking from geo-spatial trend analysis using time-series based pattern mining techniques and transfer learning.</li> <li>To build time-series data analytics for a particular geo-location to detect the trend of spreading rumours previously in that area. Then the detected trends, obtained using time-series data mining techniques, will be used to detect the underlying factors of the spread news.</li> </ul>