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| **Summary Report of Research Papers** | | | | |
| **Sl.**  **No.** | **Title of the Paper with Author(s) Name** | **Journal/Conference** | **Year of Publication** | **Highlights** |
| **1** | **Responses of extreme high temperatures to urbanization in the Beijing–Tianjin– Hebei urban agglomeration in the context of a changing climate, Yujie Wang, Yuyu Ren, Lianchun Song, Yang Xiang** | Meteorological Applications: Volume 28, Issue-5 | 2021 | * Based on the homogenized daily temperatures from 174 meteorological observation stations, six extreme hot events were detected. * The results revealed the spatiotemporal change characteristics of the extreme high temperature in the BTH. The acquired evidence showed the maximum daily minimum temperature (TNx), high-temperature days (SU35), hot night days (TR25), and heatwave spell durations (HWDI) have significantly increased, while the daily temperature range (DTR) has significantly decreased (p < 0.01) during 1961–2018. * The SU35, TR25 and HWDI in 2010s were 68%, 2.8 times and 2.1 times higher than that in 1980s, respectively. since 1961, the high-temperature season in the BTH has been getting longer at a rate of 7.4d/10a. * The mean contribution of urbanization on maximum daily maximum temperature (TXx), TNx, SU35 and TR25 was 68%, 45% and 27% in Beijing, Tianjin and Shijiazhuang, respectively**.** |

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| **2** | **Battles of mobile payment networks: The impacts of network structures, technology complementarities and institutional mechanisms on consumer loyalty,** [**Xiang Gong,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Gong%2C%2BXiang) [**Christy**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Cheung%2C%2BChristy%2BM%2BK)  [**M. K. Cheung,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Cheung%2C%2BChristy%2BM%2BK) [**Shan**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Liu%2C%2BShan)[**Liu,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Liu%2C%2BShan) [**Kem Z. K.**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Zhang%2C%2BKem%2BZ%2BK)  [**Zhang,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Zhang%2C%2BKem%2BZ%2BK) [**Matthew K.**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Lee%2C%2BMatthew%2BK%2BO)  [**O. Lee**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Lee%2C%2BMatthew%2BK%2BO) | Information Systems Journal | 2021 | * Most information systems (IS) research takes for granted that consumers' adoption and the use of mobile payment (MP) applications are motivated by generic factors such as perceived usefulness and perceived ease of use. * Using a mixed methods design, we find that direct network effects indirect network effects and negative network effects are key determinants of perceived benefits, which further promote MP consumer loyalty. Furthermore, except for general institutional structure and general structural assurance, all of the network effects are important predictors of switching costs, which influence MP consumer loyalty. * The study enriches the IS literature by problematizing the core assumption underlying the MP adoption and use research and offering a contextual explanation of MP consumer loyalty. The work also provides practitioners with insights into how to better leverage network effects on MP consumer loyalty. |
| **3** | **Bayesian stochastic configuration networks for robust data modelling,** [**Rongzhi**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Wu%2C%2BRongzhi)  [**Wu,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Wu%2C%2BRongzhi) [**Binyuan**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Lv%2C%2BBinyuan)[**Lv,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Lv%2C%2BBinyuan) [**Chaoming**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Dai%2C%2BChaoming)  [**Dai,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Dai%2C%2BChaoming) [**Weigang Wang**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Wang%2C%2BWeigang) | Concurrency and computation: Practice and Experience | 2021 | * The SCN networks is incrementally generated by stochastic configuration (SC) algorithms. * It randomly assigns the input weights and deviations of hidden nodes through a supervisory mechanism, which can be trained by solving linear modelling problems. * The Bayesian training algorithm we proposed can obtain an entire probability distribution on the optimal output weight of the SCN networks, instead of a single pointwise estimate. * Experimental results show that our proposed Bayesian SCN algorithm performs well in solving data modelling problems with a large number of outliers. |

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| **4** | **Security-centric ranking algorithm and two privacy scores to mitigate intrusive apps**, [**Fadi**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Mohsen%2C%2BFadi)[**Mohsen,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Mohsen%2C%2BFadi) [**Hamed**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Abdelhaq%2C%2BHamed)[**Abdelhaq,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Abdelhaq%2C%2BHamed) [**Halil**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Bisgin%2C%2BHalil)[**Bisgin**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Bisgin%2C%2BHalil) | Concurrency and computation: Practice and Experience | 2021 | * Studies have revealed that the vast majority of users either do not pay attention to privacy or unable to comprehend privacy messages. * It proposes and evaluates a new security- centric ranking algorithm built on top of the Elasticsearch engine to help users evade such apps. The algorithm calculates an intrusiveness score for an app based on its requested permissions, received system actions, and users’ privacy preferences. * We evaluate the ranking algorithm using a million Android applications, contextual data and APK files, that we collect from the Google Play store. The results show that the scoring and reranking steps add minor overhead. * These results suggest that our proposed system would definitely protect the privacy of mobile users and pushes developers into requesting least amount of privileges. |

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| **5** | **A scale for measuring middle school students' attitudes toward programming,**  [**Demet Gul,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Gul%2C%2BDemet) [**Ibrahim**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Cetin%2C%2BIbrahim)[**Cetin,**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Cetin%2C%2BIbrahim) [**M. Yasar**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Ozden%2C%2BM%2BYasar)[**Ozden**](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Ozden%2C%2BM%2BYasar) | [Computer](https://onlinelibrary.wiley.com/journal/10990542) [Applications in](https://onlinelibrary.wiley.com/journal/10990542) [Engineering](https://onlinelibrary.wiley.com/journal/10990542) [Education](https://onlinelibrary.wiley.com/journal/10990542) | 2021 | * Computing is an integral part of the STEAM framework. The aim of this study is to develop a valid and reliable scale to measure middle school students' attitudes toward programming. * In the first phase of the study, exploratory factor analysis was conducted with data collected from a total of 508 middle school students. Exploratory factor analysis yielded a one‐dimensional attitude scale. * In the second phase of the study, confirmatory factor analysis was used on data obtained from 414 middle school students to examine factor structure. Analyses provided evidence for the factorial structure of the scale. The Cronbach α coefficient of the scale was found to be .93. Then scale was administered to 65 middle school students who attended after‐school coding clubs and who did not attend after‐school coding clubs. * It can be concluded that the scale is a reliable and valid scale for measuring middle school students' attitudes toward programming. |