Important Conference Publication

- [1] Thomas Haines, Rajeev Goré, and Mukesh Tiwari. Verified Verifiers for Verifying Elections. In Proceedings of the 2019 ACM SIGSAC Conference on Computer and Communications Security, CCS '19, page 685–702, New York, NY, USA, 2019. Association for Computing Machinery. https://github.com/mukeshtiwari/secure-e-voting-with-coq. (co-developer with Thomas Haines. I worked on efficient finite Field arithmetic, required for efficient zero-knowledge-proof validation of well-formedness of a ballot)
- [2] Thomas Haines, Dirk Pattinson, and Mukesh Tiwari. Verifiable Homomorphic Tallying for the Schulze Vote Counting Scheme, In Verified Software: Theories, Tools, and Experiments. Springer, 2019. https://github.com/mukeshtiwari/EncryptionSchulze/tree/master/code/Workingcode (lead developer, project duration: 2 years)
- [3] Milad K. Ghale, Rajeev Goré, Dirk Pattinson, and Mukesh Tiwari. Modular Formalisation and Verification of STV Algorithms. In Robert Krimmer, Melanie Volkamer, Véronique Cortier, Rajeev Goré, Manik Hapsara, Uwe Serdültt, and David Duenas-Cid, editors, Electronic Voting, pages 51–66, Cham, 2018. Springer International Publishing. https://github.com/mukeshtiwari/Modular-STVCalculi. (codeveloper with Milad K. Ghale. I proved some of the critical theorems, required for code extraction)
- [4] Lyria Bennett Moses, Rajeev Goré, Ron Levy, Dirk Pattinson, and Mukesh Tiwari. No More Excuses: Automated Synthesis of Practical and Verifiable Vote-Counting Programs for Complex Voting Schemes. In Robert Krimmer, Melanie Volkamer, Nadja Braun Binder, Norbert Kersting, Olivier Pereira, and Carsten Schürmann, editors, Electronic Voting, pages 66–83, Cham, 2017. Springer International Publishing. https://github.com/mukeshtiwari/formalized-voting/tree/master/SchulzeOCaml (lead developer, project duration: 6 months)
- [5] Dirk Pattinson and Mukesh Tiwari. Schulze Voting as Evidence Carrying Computation. In Mauricio Ayala-Rincón and César A, Muñoz, editors, *Interactive Theorem Proving*, pages 410–426. Cham, 2017. Springer International Publishing. https://github.com/mukeshtiwari/formalized-voting/blob/master/paper-code (lead developer, project duration: 1 year)